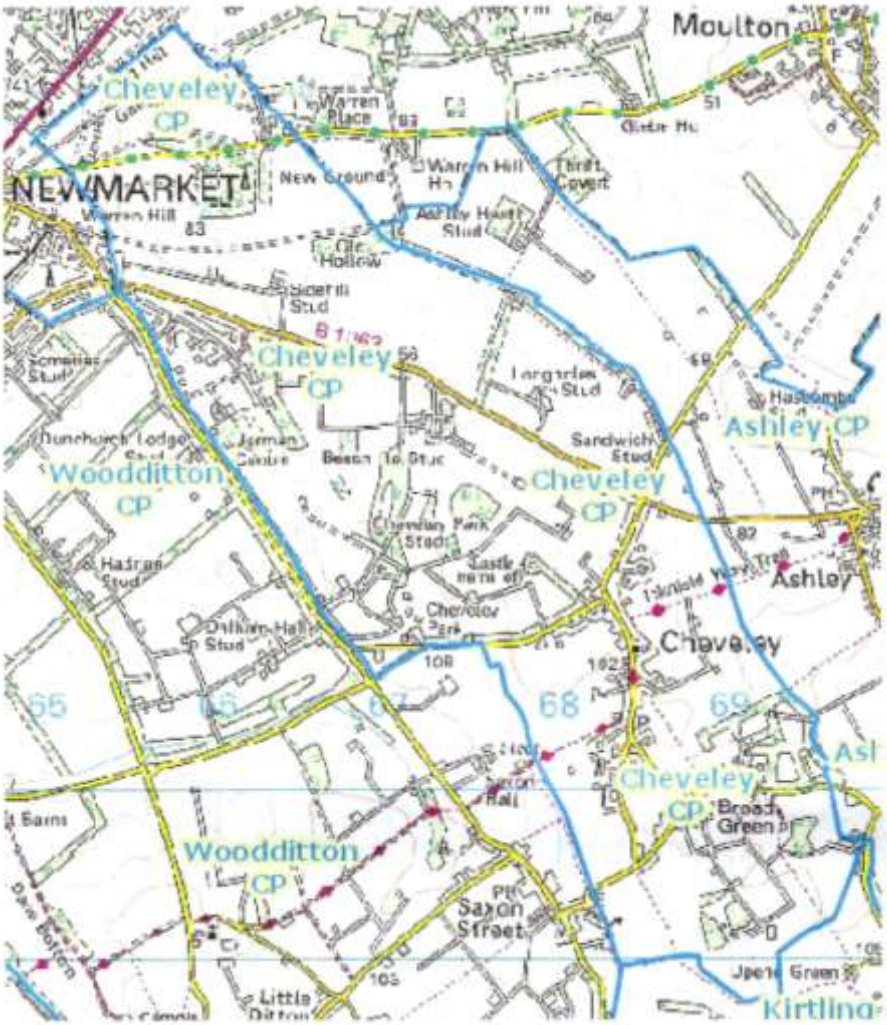
Cheveley Parish Biodiversity Audit 2015/16



The Parish Boundary (blue line)

October 2016

Cheveley Parish Biodiversity Audit

Report produced by Cheveley Parish Biodiversity Group[1] at the invitation of Cheveley Parish Council.

Introduction

In summer 2014 the writer received an invitation from Cheveley Parish Council to undertake a Biodiversity Audit to help fulfil the obligation, required of all councils, to include environmental issues in their decision making. A proposal paper was put to The Council suggesting how the task might be undertaken. The proposal recommended the formation of a local group of volunteers (Cheveley Parish Biodiversity Group) to work with Cambridge and Peterborough Environmental Records Centre (CPERC), an organisation with the responsibility of managing and storing local biodiversity information in conjunction with a wide network of wildlife recorders. The local group was formed, and met a few times to plan the work and has led the audit. The group, which has expanded, are wildlife enthusiasts each with professional or personal knowledge of aspects of ecology, environment, habitats, or particular flora or fauna. They have been supported by staff at Cambridgeshire and Peterborough Environmental Records Centre (CPERC) and specialist wildlife recorders who share information with CPERC and various nature conservation organisations. CPERC have digital mapping and database capabilities which have been made available throughout the audit process. A range of pre-existing tree and wildlife records related to Cheveley Parish have been made available and a major achievement has been the generation of many new records which have boosted CPERC's database for Cheveley Parish. So the beneficiaries of the work are not only The Parish Council but also wider society through the greater amount of local wildlife information held by CPERC.

It is important to note that The Parish extends north to include the gallops right up to the boundary of properties on Bury Road, Newmarket. The extent of Cheveley Parish surprises many people when they are shown the Ordnance Survey map that delineates the Parish Boundary. (See Report cover and Appendix 1)

Summary

The audit process has essentially consisted of two streams of work:

- Reviewing and assembling maps, plans and record documents here in one report for the convenience of the readers. They may be found in the Appendices 1 – 4 and 6 – 10
    - Appendix 1 - OS map showing Parish boundary
    - Appendix 2 – Cheveley Land Use map c1800
    - Appendix 3 – Parish Habitat Maps 1990s
    - Appendix 4 – Parish habitat Map 2016
    - Appendix 6 – Duchess Park site plan showing public open spaces
    - Appendix 7 - The Jarman Centre schematic site plan
    - Appendix 8 – County Wildlife Sites, map and site details
    - Appendix 9 – Tree Preservation Orders, detailed lists and maps
    - Appendix 10 – Map of official Rights of Way (public footpaths and bridleways)

[1] Contact cudbyecology@gmail.com

In addition, information from tree surveys at The Recreation Ground, Cemetery and Duchess Park has been included in the text.

- Organising a number of surveys, including domestic gardens, publicly accessible locations, and private land made accessible by owners with an interest in wildlife. These activities have involved specialists and have led to many new records now held on the CPERC database.
    - Appendix 5 – Results of Garden Wildlife Survey
    - Appendix 11 – Letter to Stud Managers
    - Appendix 12 – Examples of Parish Wildlife Records on CPERC database

Note:

Those who would like more information on the records held by CPERC can request data by contacting CPERC DATA, (for more details see CPERC Website). CPERC does not usually charge for enquiries of a non-commercial nature.

In addition to the *'new work'* shown in Appendices 5, 11 and 12, wildlife recorders visited the following locations:

- The Warren Hill County Wildlife Site
- Sampling of Public Footpaths and roadside verges
- Duchess Park
- The Jarman Centre
- Private orchard and woodland on Centre Drive

Overview of methodology

This report is the result of an audit (using various existing data sources and new surveys). The wildlife records have come from a variety of sources:

- Pre existing material held by Cambridgeshire and Peterborough Environmental Records Centre (CPERC)
- Pre existing and continuing work at Duchess Park[2]. This work has been made available to The Parish Council and has featured on their website
- Pre existing tree records for The Recreation Ground and Cemetery, held by Cheveley Parish Council resulting from specialist arborist's surveys of condition.
- Tree Preservation Order data from East Cambridgeshire District Council
- Information provided by The Jarman Centre
- The Parish wide garden survey (questionnaire in 2015)
- Special wildlife recorder visits to Warren Hill, Cheveley footpaths, cemetery, Jarman Centre, Duchess Park, orchard and woodland on Centre Drive
- Photographs and information provided by members of The Cheveley Parish Biodiversity Group
- Responses from Studs

Most importantly and very encouragingly CPERC now holds over 3600 individual records for The Parish which is a great advance from the situation before this audit was undertaken when Cheveley Parish was very under represented on the CPERC database in common with other parishes in this part of the county.

[2] Four volumes of the history and natural history at Duchess Park by DB Cudby
Duchess Park History and Natural History:
Volume 1 An Introduction and History
Volume 2 Natural History Introduction
Volume 3 Fauna Records
Volume 4 Flora Records

The purpose of the work has been to create an improved record and therefore greater knowledge of what currently exists within The Parish at both the habitat level and species level. Clearly it would be impossible to visit every site or record every species but a reliable snapshot now exists. Much more could be done and reference to this comes later.

Overview of habitats within Cheveley Parish

The habitats and therefore the biodiversity of the plants and animals in The Parish are essentially determined by three factors, geology, climate and land use.

Geology

The west of the county of Suffolk lies on more resistant Cretaceous Chalk (145 – 65 million years old). This chalk is the north-eastern extreme of the Southern England Chalk Formation that stretches from Dorset in the south west to Dover in the south east. The Chalk is less easily eroded so forms the only significant hills in the county. The highest point of the county is Great Wood Hill at OS ref. TL786558, the highest point in Suffolk and the highest point of the Newmarket Ridge, near the village of Rede which reaches 128 m.

The Newmarket Ridge is a ridge of low chalk hills extending for over 20 miles, from Bishop's Stortford in Hertfordshire to Bury St Edmunds in Suffolk, passing through the south-eastern corner of Cambridgeshire.

The book, Geology of the Country around Cambridge[3] goes into much detail about the chalk strata and includes the following remarks about Cheveley. The boundary between the Middle and Upper Chalk has been mapped at the base of the Chalk Rock. The rock band, well exposed near Cheveley in Chalkpit Plantation, (ed. close to Cheveley Park), consists of hard nodules of cream to pale yellow chalk in a softer white matrix: large flints are present.

There is also a reference to chalk visible in a quarry at Longholes Stud.

The chalk is generally overlain with boulder clay, so alkaline clay soils characterise The Parish.

Climate

Cheveley is firmly in that part of East Anglia that has a low annual rainfall. The climate of East Anglia is generally dry and mild although winters are colder than the west of the country. The region is among the driest in the United Kingdom with many areas receiving less than 700mm of rainfall a year. Rainfall is fairly evenly distributed throughout the year. The combination of geology and climate result in The Parish having no watercourses of significance and few natural ponds.

Land use

Although there was agricultural land within The Parish up to the 1800's, almost all is now built upon or converted to grassland used by the horse racing industry. The two major types of grassland occur on The Gallops around Warren Hill and the many paddocks within the stud farms. The former is mown frequently and the latter grazed.

[3] Geology of the Country around Cambridge, Worssam and Taylor 1969

The Parish map shown in Appendix 2 clearly shows that agriculture existed c1800. During the 1800s existing country estates with large houses grew into stud businesses and these expanded beyond their existing garden-scapes turning former agricultural land into paddocks bounded with hedges and more substantial wooded areas serving as windbreaks and adding to visual amenity. The habitat maps in Appendix 3 compiled in the 1990s show the results of a transformation that occurred over two centuries. Appendix 4 shows the habitat map for 2016.

Observations and records by habitat type

i. Roadside verges

During the course of carrying out this audit it became clear that some roadside verges are subject to mowing while early spring flowers are still in flower. This is a problem not confined to Cheveley Parish. There are national guidelines on verge maintenance that has been adopted by some Highway Authorities. Here in Cheveley Parish it may be necessary to appeal to Highway Contractors and Landowners to avoid this vandalism. The following observations by a member of The Biodiversity Group illustrate the point.

I have found some impressive stands of Oxlip (nationally scarce) and Wood Anemone in Cheveley (Little Green/Banstead area) which is very pleasing. (17/4/15)

And just four days later, the following:

More verges have been cut again today – the entire length of Coach Lane and all the banks – all the Wood anemone, Violets and Strawberry gone. The footpath to Broad Green has also been cut hedge to hedge and all the path side wood anemones have all gone. I have reported this to the Parish Council (it may be them that has cut it we don't know yet) This is something I think we will have to tackle – maybe for next season when we have all our records in and a better idea of who cuts what.

Found Ladies Smock (caterpillar food plant for Orange Tip) today clinging to the ditch edge out of reach of the mower by road near Banstead Manor. Singles seen on Coach Lane and Oak Lane but most probably cut before they even get the chance. (21/4/15)

It would be desirable to have a relaxation of cutting regimes between April and June/July to allow plants to flower. If this was done across the whole parish the benefits to local wildlife would be significant.

The Good Verge Guide , published by Plantlife is a valuable guide to managing this problem.

Private gardens

Recognising that private gardens are an important habitat and that there would be benefits in engaging with The Parish Residents, it was decided to produce a questionnaire to be delivered to every household in The Parish. The document was modelled on the annual RSPB Big Garden Bird Watch. Residents were asked to indicate if they had seen a number of iconic but somewhat threatened species. The numerical data from the survey is summarised in Appendix 5. Many respondents also made helpful comments that added a qualitative feel that compliments the numbers. Examples of these comments are included below:

Pipistrelles, approx 10 – 12 in eaves of house, come out at dusk - *Sophie*

Stoats occasionally seen in garden - *Judi*

Hedgehogs, don't see them but see their deposits - *Rosemary*

Owls, heard at night close by the house- *Barbara and Tommy*

Frogs, we have a large resident breeding colony – *Jane and Raymond*

Bats, all year round, think they reside in my roof – *Alison*

Cuckoo, heard but not seen – *Kathryn*

Bats, not in garden but often seen at Cheveley Recreation Ground at dusk – *Stuart*

Old trees, one old native cherry in garden, another on adjacent community land – *Rhodri*

Hedgehogs, at least two come every night, we feed them nightly – *Betty*

Common newts, quite large quantities (around 10) – *Leigh*

Old trees, yew hedge at back of house which is hundreds of years old – *Rachel*

Hares, in paddock adjoining our house and garden – *Andrew*

Owls, hear many owls – *Geoffrey*

Bats, present for last 10 years since living at our house – *Amanda*

Dragonflies, seen regularly, details unknown – *Alison and Mervyn*

Bats, Pipistrelles probably, they roost in the church and Brook Stud probably – *John*

House sparrows, several especially in winter when I feed them – *Margaret*

Frogs, sadly killed with lawn mower – *Sarah*

Toads, single in my compost heap. Old trees – I have a 60 year old orchard. – *David*

Owls, have not seen but hear frequently. Cuckoo, have seen on feeder – *Sue*

Frogs and toads, regular visitors, possibly 20-30. Owls, Barn owls heard regularly, Tawny owls sometimes – *Wendy*

Hares, in adjacent paddock at Stud, several this spring – *Julie*

Dragon and damselflies, Broad bodied chaser, Large red damselfly, Common Darter, Ruddy Darter. Bats, Pipistrelles common and soprano – *David*

Owls, heard on Recreation Ground – *Mark*

ii. Recreation ground

The trees at this location are well documented both in terms of species present and condition. The records have been compiled over a number of years as The Parish Council has a contract with a specialist company to carry out annual inspections and maintenance. This is mainly driven by safety considerations but the District Council Trees Officer is consulted where major concerns arise and is therefore familiar with the trees on this site.

The species list is as follows:

Apple	Cherry	Field maple	Oak
Ash	Crack willow	Horse chestnut	Rowan
Beech	Cypress (row)	Lime	Swedish whitebeam
Birch	Elm (singles and groups)	Myrobalan plum	Sycamore
		Norway maple	

iii. Cemetery

As with the recreation ground, the trees at this location are well documented both in terms of species present and condition. The records have been compiled over a number of years as The Parish Council has a contract with a specialist company to carry out annual inspections and maintenance. This is mainly driven by safety considerations but the District Council Trees Officer is consulted where major concerns arise and is therefore familiar with the trees on this site.

The species list is as follows:

Ash	Oak
Birch	Plum
Cherry	Poplar
Elm	Rowan
Field maple	Sumach
Holly	Swedish whitebeam
Hornbeam	Sycamore
Horse chestnut	Willow
Irish yew	Yew
Lime	

iv. Duchess Park Public Open Spaces

Duchess Park, a development between Duchess Drive and Centre Drive is unusual in that the extensive open spaces are public open spaces. The open spaces contain a variety of areas of distinct habitat including, shrubs and specimen trees, short grass, grassland maintained as meadow, copse, old and new hedges, an old apple orchard, remnants of earlier stone fruit planting and scrub. The open space links with The Sixteen Acre Plantation which in turn contains The Jarman Centre and also links with a fifty year old orchard on Centre Drive. Wildlife can move freely between these locations.

See plan in Appendix 4

A formal tree survey in 2015 provided the following tree species list:

Acer campestre	Pinus spp
Acer pseudoplatanus	Pinus sylvestris
Acer spp	Populus spp
Aesculus hippocastanum	Prunus avium
Betula pendula	Prunus spinosa
Corylus avellana	Prunus spp
Cretagus monogyna	Quercus robur
Fagus sylvatica	Salix spp
Fraxinus excelsior	Sambucus nigra
Ilex aquifolium	Sorbus acuparia
Juglans regia	Sorbus spp
Larix X decidua	Tillia spp
Malus spp	Ulmus procera

Here is an extract from a recent CPERC Newsletter referring to the Recorders' Day in May 2016:

In Duchess Park, which is a new area of housing with green areas, Jonathan Shanklin noted several species new to the tetrad[4] and a few to the hectad such as Ranunculus parviflorus, Trifolium micranthum and Trifolium subterraneum. On the same day our local lichenologist Mark Powell recorded a total of 196 records of 127 different taxa including Micarea curvata, found on a sandstone headstone in the cemetery of St Mary's Church and is new to Cambridgeshire. Also found was Normandina pulchella which has only been recorded in the county since 2012.

v. The Jarman Centre

The Jarman Centre is a large area of mixed woodland and more open and maintained grass areas (see plan in Appendix 7). It includes remnants of the double lime avenue which used to extend from Cheveley Park right down what is now Centre Drive. It is thoughtfully managed by Jarman Centre volunteers for its users (Cambridgeshire Guides) with wildlife in mind. A visit in 2016 by a group of wildlife recorders (botanists, moss and lichen specialists) revealed species that merited addition to the CPERC records. It had earlier been noted by a member of The Biodiversity Group that within the grounds, tucked away and not too accessible was a small *'lawn'* of wild thyme and wild strawberries. This was also found by the recorders and was a delight for all present. Mosses and a rather unusual Acer were also recorded. The Jarman Centre merits a much more thorough botanical survey. Much of the wildlife interest at The Jarman Centre comes from the fact that there is a mixture of scrub and small chalk grassland remnants. Management of the site should seek to ensure these open areas within the scrub are kept open and expanded where possible.

Here are some extracts from a recent CPERC Newsletter:

In May this year we visited the Jarman Centre and nearby Duchess Park. The Jarman Centre is a girl guiding centre, with a mixture of habitats including scrub which has developed on species rich chalk grassland as very small remnant patches with large thyme Thymus pulegioides are still found. Within these fragrant patches pill woodlice Armadillidium vulgare were found wandering through.

Other highlights at the Jarman Centre included:

The discovery by noted bryologist Mark Hill of a fine patch of Hylocomium splendens which has not been seen in Vice-county 29 since 1979. Mark also saw two species which may be new to the hectad[5]; Rhytidiadelphus triquetrus and Orthotrichum stramineum.

Hylocomium splendens

[4] 2 x 2 1km squares

[5] 10 x 10 1km squares

Rhytidiadelphus triquetrus

vi. County Wildlife Sites

County Wildlife Sites are regarded as special, meeting the criteria in the Guidelines. They are valued locally for their landscape, history, geology or ecology. These sites are just a little short of being designated as the statutory Sites of Special Scientific Interest (SSSI). The Parish can boast two such sites, both of which *'make the grade'* because of their botanical interest and natural heritage value. (For map and site details see Appendix 8).

The selection criteria can be found at the Cambridgeshire County Council website using this link: Cambridgeshire County Council - Nature Conservation Sites

vii. Tree Preservation Orders

Tree Preservation Orders are indicative of trees of rarity, historic or aesthetic value and therefore have a place in the assessment of the biodiversity of The Parish. Appendix 9 gives the data as held by East Cambridgeshire District Council at 2013.

viii. Public footpaths and bridleways

Official Public Rights of Way may themselves provide wildlife habitats but in the context of Cheveley Parish their greater value lies in the access that they provide to otherwise inaccessible habitats within the stud lands. See Appendix 10 for the routes.

ix. Studs and Gallops

An approach was made to all of the local studs to explore their willingness to share something of their knowledge of the habitats and wildlife present on their land. See copy of letter in Appendix 11. Two studs replied.

The typical landscape of the local studs is illustrated in the photographs below.

Within The Parish there are around 225 paddocks in total, many with hedge boundaries that provide opportunities for birds and invertebrates. The total length of these hedges is difficult to calculate but a quick estimate suggests that there are in total tens of kilometres of which around six kilometres are substantial shelter belts. There are also a variety of woodland areas within and bounding the studs (including The Sixteen Acre Plantation that contains The Jarman Centre), about 30 in total including those on The Gallops, Side Hill, Warren Hill and Long Hill. The woodlands vary greatly in size and age. An estimate from available plans suggests that the size distribution of these wooded areas is approximately as follows:

> 4 hectares	2
2 – 4 hectares	3
0.5 –2 hectares	10
< 0.5 hectares	15

In age the wooded areas probably mostly range from the 1850s to the 2000s. The older stud lands usually were developed around an existing farm house with a Victorian garden. It has not been possible to access most of these areas but the fact that they are often linked together by hedges and shelter belts suggests that they collectively represent a great habitat for birds, invertebrates, small mammals and some larger mammals. The botanical variety is unclear but some observations have been made by visits involving botanists. At this stage, these observations have included woodland on Warren Hill, The Jarman Centre, Duchess Park, and a sample of the Public Footpaths passing through the studs. The records are included in the CPERC database.

The information below was obtained with the help of the two studs who responded to the letter. It was heartening to realise that biodiversity is of interest and one manager commented, *"That is interesting, I had no idea that Cheveley had a Biodiversity Group"*

First a brief historical perspective on the 19th century garden at the heart of one stud. There are trees, hedges, paths and buildings, maintained to a high standard but with many trees showing their age. It is encouraging to note however that *there is a tradition of tree planting in and around this old garden that extends over a period of about 150 years. The employees clearly love the site and every effort is made to manage things, particularly the trees with a balance of remedial tree work and allowing some wood to be home to birds and invertebrates. The garden has a rich bird fauna, nurtured by the gardeners. During a visit a Brown Hare wandered up the path and stood about 3 metres away. The garden is regularly visited by Green Woodpeckers and Little Owls. Regarding the management of the pastures, they are rested for periods to break the cycle of horse parasites (worms). A group of around 14 Fallow Deer regularly visit as well as Muntjac.*

Second, here is a short species list (2014 – 2016) provided by another sympathetic stud owner:

Muntjac	Hedgehog	Woodcock	Nuthatch
Hare	Rabbit	Pheasant	Robin
Grey squirrel	Field mice	French Partridge	Little Owl
		Woodpigeon	Barn Owl
Heron	Goldfinch	Blackbird	Nightingale
Mallard	Chaffinch	Song thrush	Greater Spotted Woodpecker
Rook	Great Tit	Mistle thrush	Green Woodpecker
Jackdaw	Blue Tit	Fieldfare	Coal Tit
Gulls (various)			

x. Trees, hedges and woodland

There are examples of 'historic' trees around The Parish. The photograph below illustrates the old practice of pollarding trees. As in coppicing, the tradition of pollarding is intended to encourage the tree to produce new growth on a regular basis to maintain a supply of new wood for various purposes, particularly for fuel, but unlike coppicing the new growth istoo high for grazing animals to reach.

A subject worthy of mention here is 'wood pasture' - Cheveley may have had some of this habitat in the past before the parkland areas of the parish became stud land. Some of the oldest trees may survive from this period. Wood pasture is where there is grassland which is grazed within an open woodland setting, and the trees are often pollarded.

The full definition of wood pasture and parkland habitat can be viewed here - UK Biodiversity Action Plan - Priority Habitat Descriptions

There is a surviving area of this habitat at the Suffolk Wildlife Trust nature reserve 'Old Broom' near Risby, Suffolk Wildlife Trust - Old Broom

xi. Orchard sites

CPERC have records of old/historic orchard sites. There are thought to be a few remaining orchard sites within The Parish, one of which being the private Centre Drive orchard, visited on a Recorders' Day as part of the audit. There is a fragment of a former orchard on the Duchess Park site. The Garden Wildlife Survey responses also hinted at bits of old orchard.

Major findings

The biodiversity of Cheveley Parish is *rooted* in trees and grass. These principal habitats are mainly but not completely determined by the dominant land use – horses. There are very few natural bodies of water and watercourses. Currently there is only one field in The Parish described as arable (between Ashley Road between Side Hill and Longholes Studs). At the time of writing it is grass and a training track.

The bird life, insect life, small and large mammals that populate the woods, hedgerows and paddocks and gallops are a consequence of the principal land use, these habitats are meticulously managed. There are parallels with modern agriculture in that the woodlands and grasslands are restricted in their biodiversity as a result of long established management practices.

Within and near the manicured stud lands are islands of greater diversity. These include woodland on the gallops, the domestic gardens, public open spaces, jewels like Cheveley Park and the Sixteen Acre Plantation containing The Jarman Centre. The two County Wildlife Sites within The Parish (Cheveley Park Veteran Trees and Warren Hill) are noted for their special botanical interest and natural heritage value.

Some Wildlife Recorder Days Highlights

There were many species, mostly botanical, observed on the various Wildlife Recorder Days. There were interesting observations about changes, for example in air pollution over recent decades and its impact on lichens, also an example of a species that has entered The Parish with imported builder's sand. These records are all included in the CPERC database of 3600 Cheveley Parish records but some highlights are included here:

- *Geranium sanguineum*, Bloody Crane's-bill, recorded again at the Warren Hill covered reservoir for the first time since the 1990s, at what may be its most easterly native location in England. This species is rare in East Anglia as a native (it can be found as a garden escape).
- Biodiversity Audit walk on 16th August (joint with walking group) discovered little previously unknown habitat of interest but a few relatively rare species in a local sense were found along the hedgerows, including Creeping Soft Grass *Holcus mollis*, a plant mainly found in woodland on acidic soils. This is one indication of both the previously more wooded nature of the parish and the fact that the parish contains areas of more acidic soil, something which is relatively rare in the county.
- Regarding lichens (from the lichen recorder) - I haven't found anything new to Britain in Cheveley but there is one nice addition to the Cambridgeshire list: *Micarea curvata* on a sandstone gravestone in the cemetery.

Conclusions

The current and future biodiversity of Cheveley Parish is heavily dependent upon;

- stud land management policies
- the safeguarding of the two County Wildlife Sites and investigating other sites that could qualify for this special status
- developing the wildlife potential of public open spaces, footpaths and road side verges
- encouraging the interest shown by domestic gardeners building upon the Garden Wildlife Survey (2015)

Opportunities for further work

The purpose of the Biodiversity Audit was to provide Cheveley Parish Councillors with a reference document that fulfils its statutory obligation to consider biodiversity in its decision making.

This report provides that document – a benchmark. The work undertaken in carrying out this audit has also greatly improved the records for The Parish on the CPERC database and available to all interested parties. Prior to this work, Cheveley parish was very poorly represented on that database, now the number of records (~3600) has improved that situation.

It would be tempting to just leave things there but it is difficult, knowing what we now know, to pass up an opportunity to suggest further work that The Parish Council may wish to lead or be involved in.

By commissioning this Biodiversity Audit, The Parish Council has shown itself to be imaginative and progressive – so why not take things further.

Here are some suggestions for continuing biodiversity work within The Parish:

- Continue an interest in biodiversity and reflect that interest in The Parish Council's work and decision making
- Provide ongoing support and encouragement to the Biodiversity Group and make use of its knowledge and enthusiasm
- Maintain links with CPERC and through them, specialist wildlife recorders
- Promote an annual wildlife recorder event within The Parish focusing each time on an aspect of biodiversity where records held by CPERC are still sketchy e.g., bats, small mammals, winter birds, pollinators, fungi and so on
- Recognise the interest in biodiversity shown by local residents and seek to provide opportunities for that interest to be built upon
- As so much of the land area and land use (the economy) of The Parish is focused on the horse racing industry, use this audit report as a vehicle to seek greater engagement with stud owners and The Jockey Club to increase awareness of biodiversity issues and knowledge sharing related to studs and gallops.
- Given that the audit has revealed that there is already a good set of records of trees, explore the concept of an *'urban arboretum'* covering the whole Parish. The purpose would be to improve even further the tree record on private land and sponsor and develop tree planting schemes
- Sponsor an annual Cheveley Guest Lecture by, for example, a wildlife, geology or climate expert
- Promote Bioblitz events (identifying as many species as possible in a short space of time – involving experts and the public) at The Recreation Ground, The Cemetery and other local sites
- Allocate space for Bio-diversity information on The Parish Council's website

Acknowledgements

The help and support of a large number of people has made this work possible. They included:

- Cheveley Parish Council
- East Cambridgeshire District Council
- All those who delivered / collected The Cheveley Garden Wildlife Survey to 950 residential properties
- Residents of The Parish who completed The Cheveley Garden Wildlife Survey
- Cambridgeshire and Peterborough Biodiversity Partnership
- Cambridgeshire and Peterborough Environmental Records Centre
- Anglian Water (access to the Warren Hill Reservoir site – part of the Warren Hill County Wildlife Site)
- The Cheveley Parish Biodiversity Group
- The Jarman Centre
- Wildlife Recorders who gave their time and knowledge to survey various locations around The Parish
- Stud Managers who felt able to contribute their wildlife records

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Post Script

The work on this audit has been very interesting, a real eye opener. The approach has been systematic, within the resources available and very much focused around list making.

It must be said however that nature doesn't organise itself around lists. Most of what happens is on an evolutionary time scale. Undoubtedly, in the last couple of centuries man has affected things at a speed which is *'unnatural'* and gives rise to surprising consequences. The number of invasive species, new pests and diseases found in the UK as a result of increased international trade, lax bio security and climate change are factors that will cause us to change landscape management expectations and practices. In the front line of these threats currently are many of our most familiar trees and pollinators.

Some of the surprises, *'natural and unnatural'* defy orderly list making and add spice to observing nature. These are the things which make biodiversity even more diverse. Here are a couple of examples observed by a member of The Biodiversity Group. We are fairly familiar with the garden and woodland birds of our parish. Cheveley Park has thrown up a couple of notable *'surprises'* during the work for this report. For example, two species not commonly seen locally are Black Redstart and a Cormorant – of the inland water race. The latter is all the more surprising given that Cheveley Parish has so few bodies of water. So the lesson is don't be surprised if you are surprised by nature

Black Redstart

And in the spirit of this post script about surprises, here are a couple of recent personal surprises. One hot late summer day as this audit report was being pieced together, maps, text, tables, photos; the kitchen door was open for ventilation and two visitors wandered in. Their visits were timely.

The first was The Herald moth, common enough but not a species that I remember having seen before, and not in the house - a very pretty thing. The Herald, how appropriate, *'was announcing'* to me that any biodiversity audit cannot do more than sample the complexity of nature. Something surprising pops up whenever we have the time and patience to look around. It had settled on the oak door between kitchen and utility room, blending very nicely, I might have missed it. So much in nature is like that.

(*Scoliopteryx libatrix*)

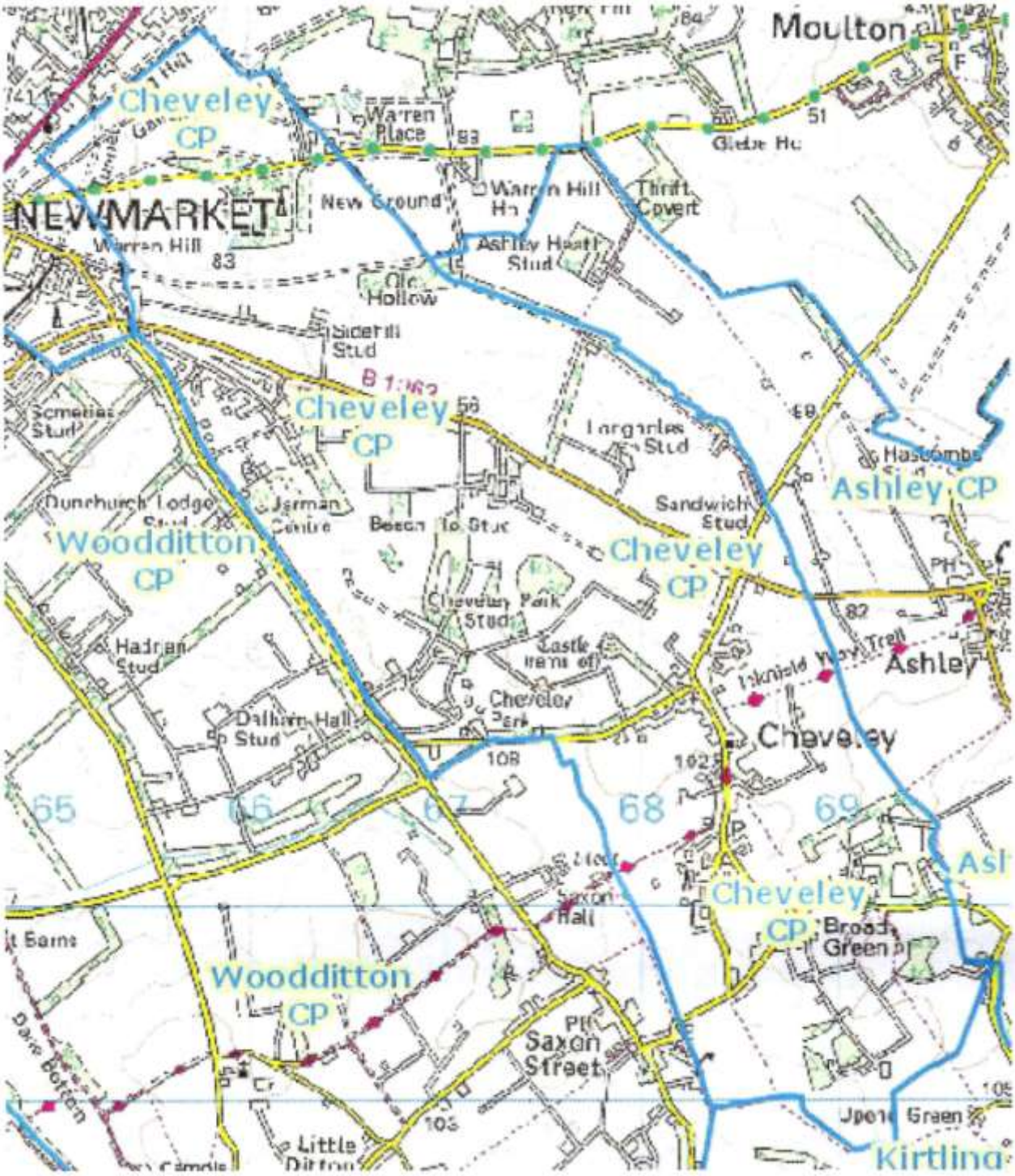
Then the second visitor, as I looked down at the floor by the open door, there was a beetle, again not rare but new to our kitchen. It turned out to be a Burying Beetle (some call them Sexton Beetles). As it was new to me I reached for my camera to take a picture so that I could identify the beetle at my leisure. It wasn't difficult to identify the beetle and remind myself that burying beetles perform a special function in nature. They take the carcasses of small mammals or birds and excavate a 'grave' for them. The buried body is then used as a nursery and food supply for the beetles eggs and larvae. My photograph is not the best but when I came to crop and enlarge it on my computer I was in disbelief when I saw that the beetle had mites near its head and on its back.

Now as a beekeeper I am only too familiar with the fact that honey bees in the UK have had to contend with varroa mites for the past quarter century. But mites on burying beetles, what is that all about? It turns out that the mites, which themselves parasitize the larvae of flies that lay their eggs on the dead bodies tucked away by the burying beetle, are hitching a ride from burial site to burial site on the back of the burying beetle.

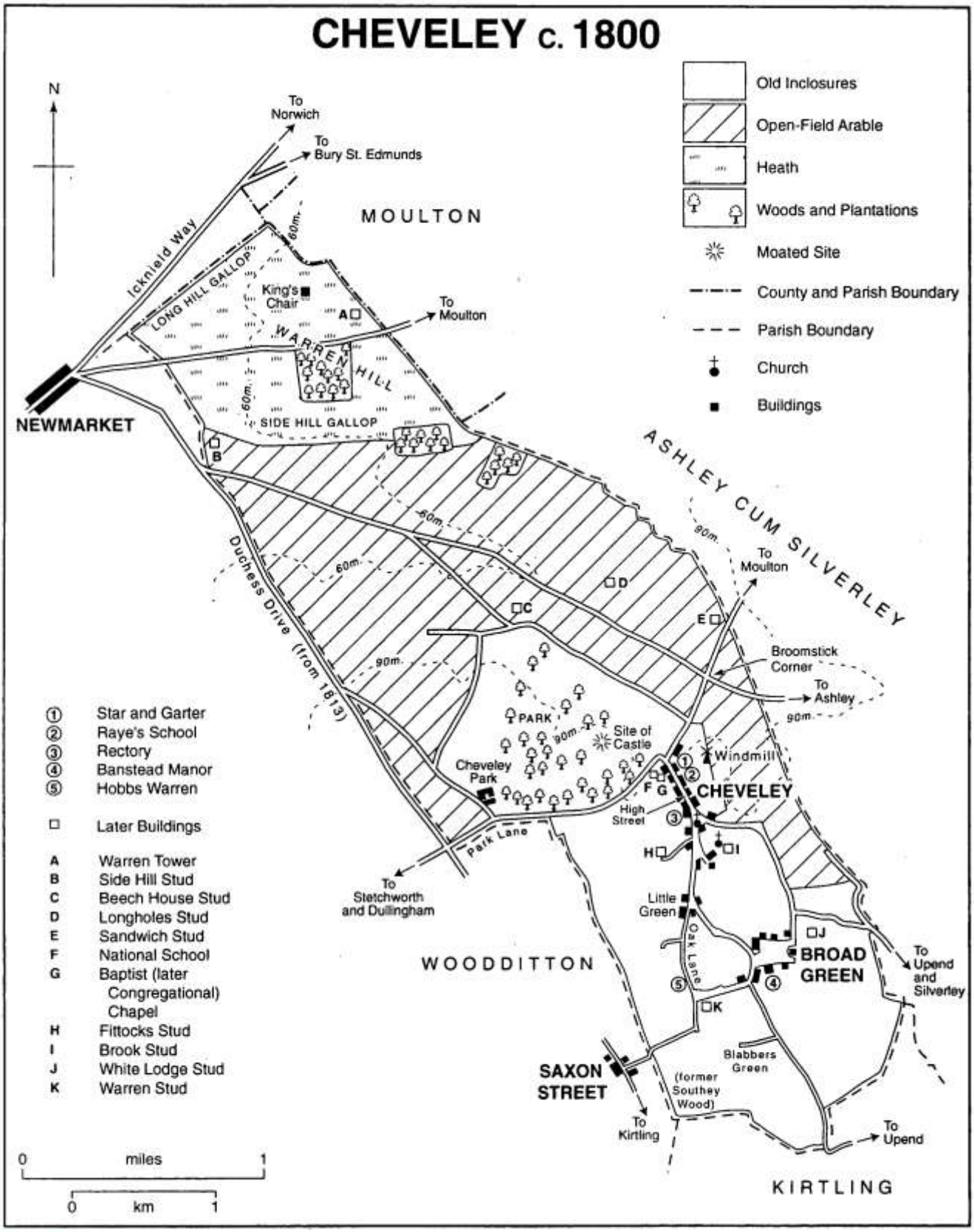
So let us remember that a biodiversity audit is a benchmark at a point in time, recording a range of habitats and species that merely indicate the complexity of the natural world. The audit cannot attempt to record every species present. We must remember to allow ourselves to be surprised and truly thrilled by the natural world, even when looking at what strays in to the house from the garden.

Appendices

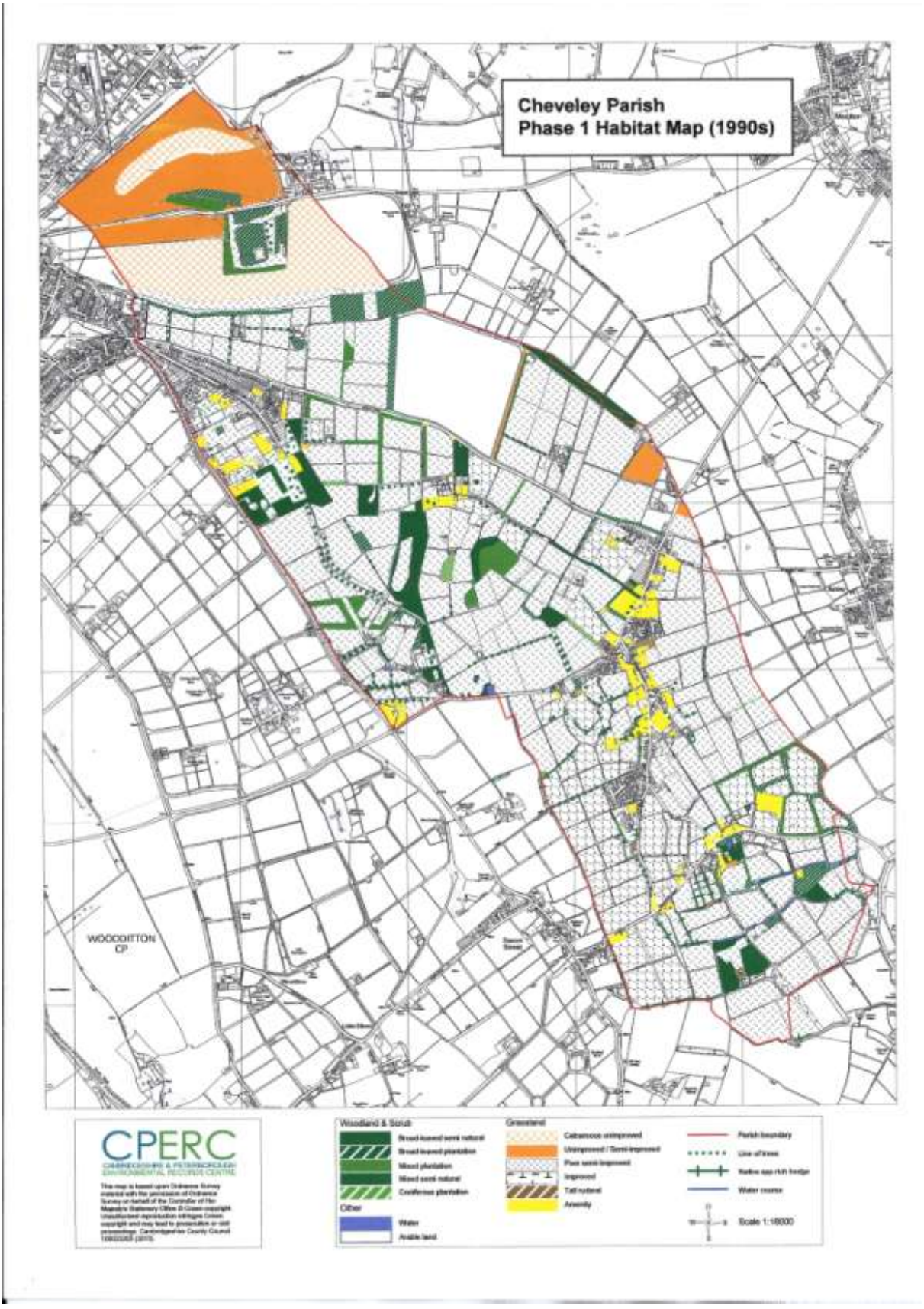
Appendix 1 – Cheveley Parish Map

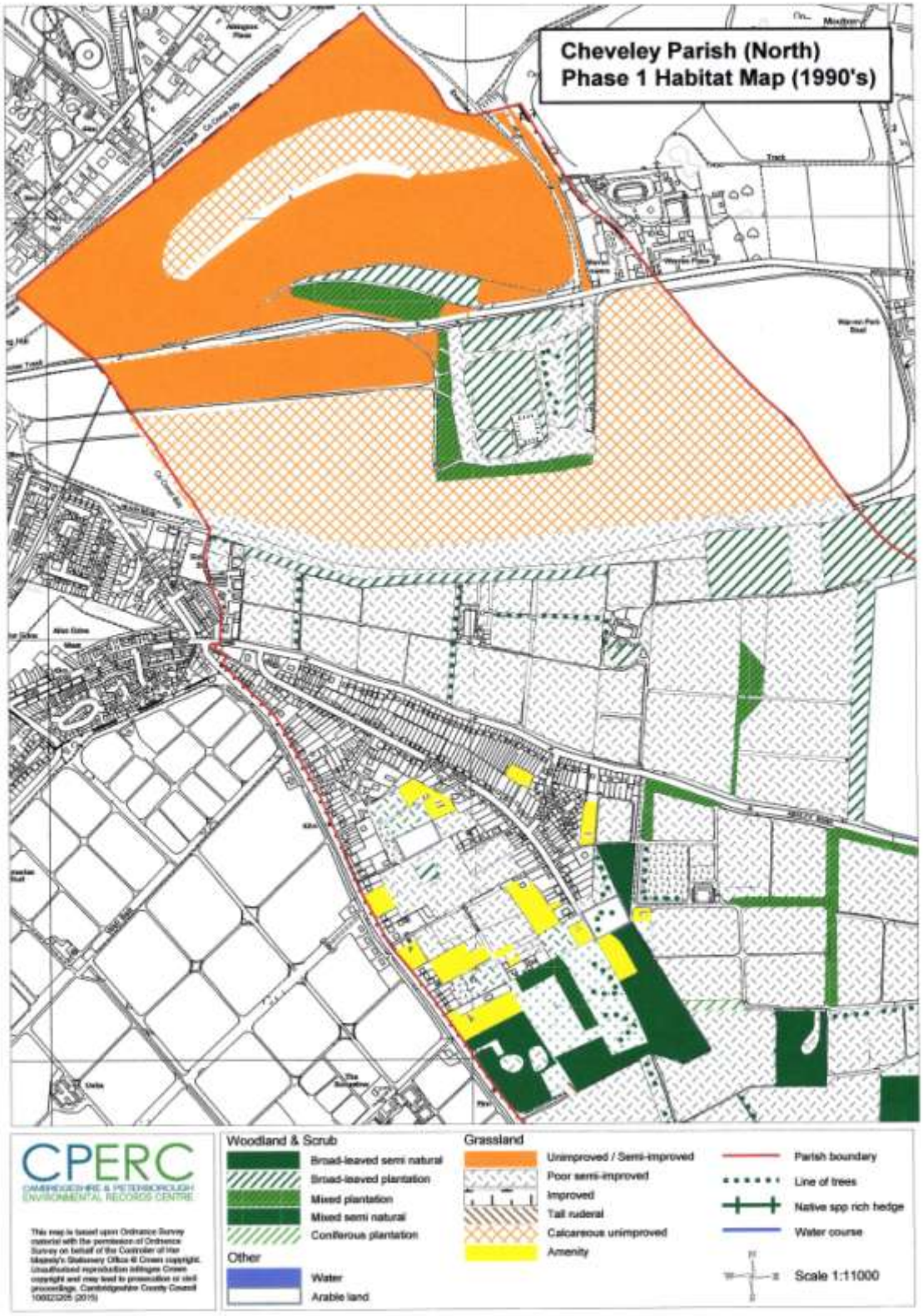


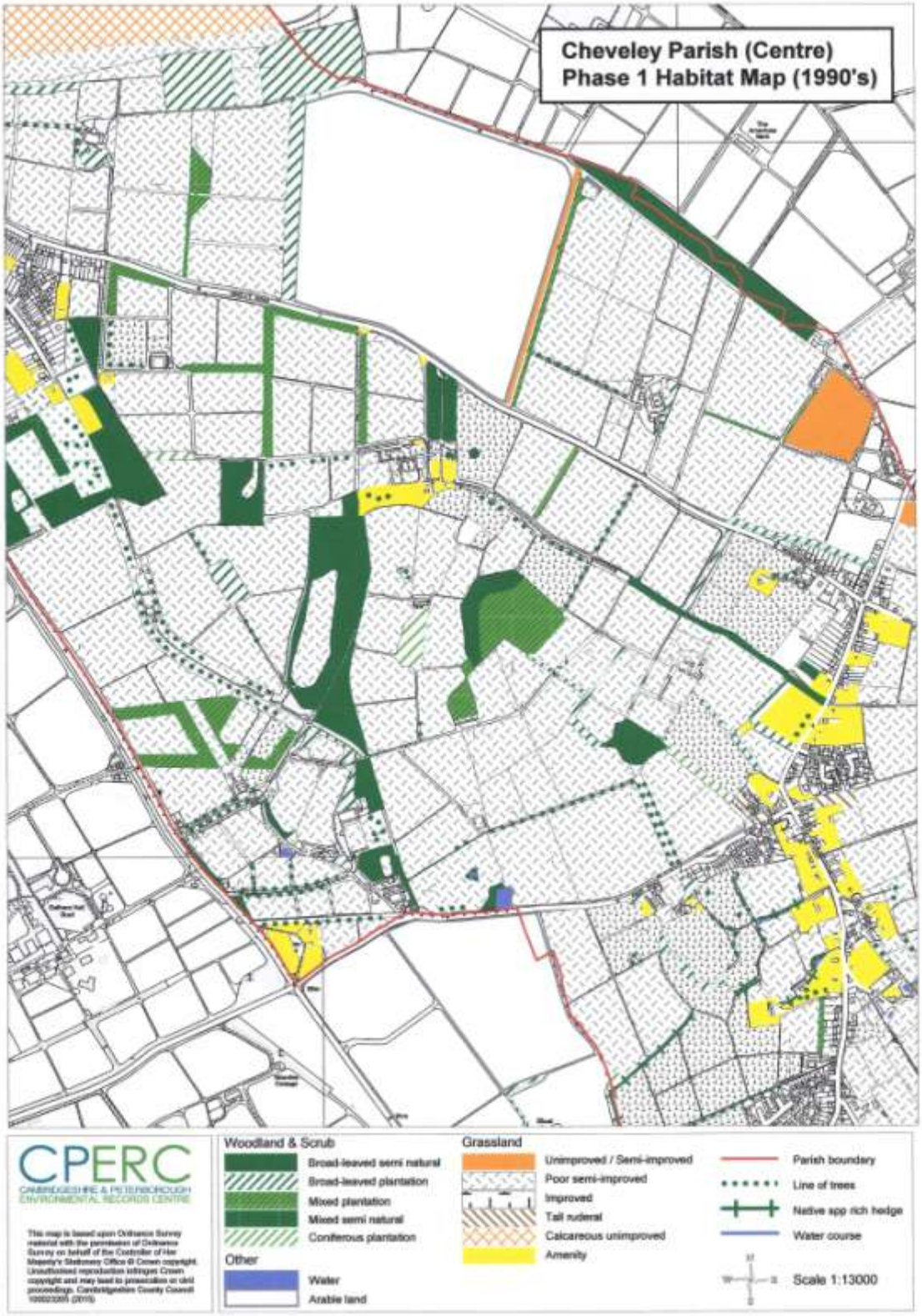
Appendix 2 – Cheveley c 1800

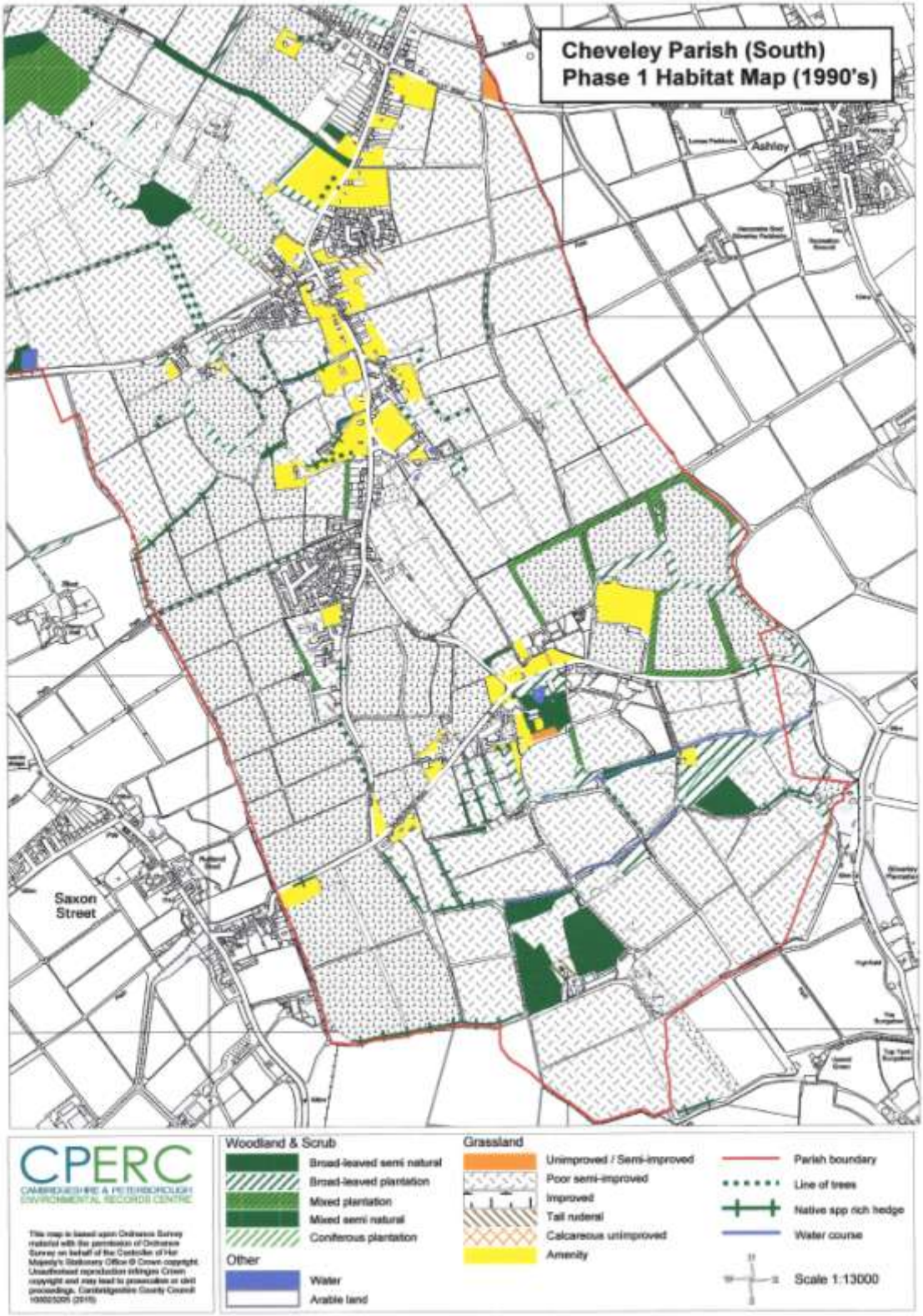


Appendix 3 – Habitat Maps 1990s

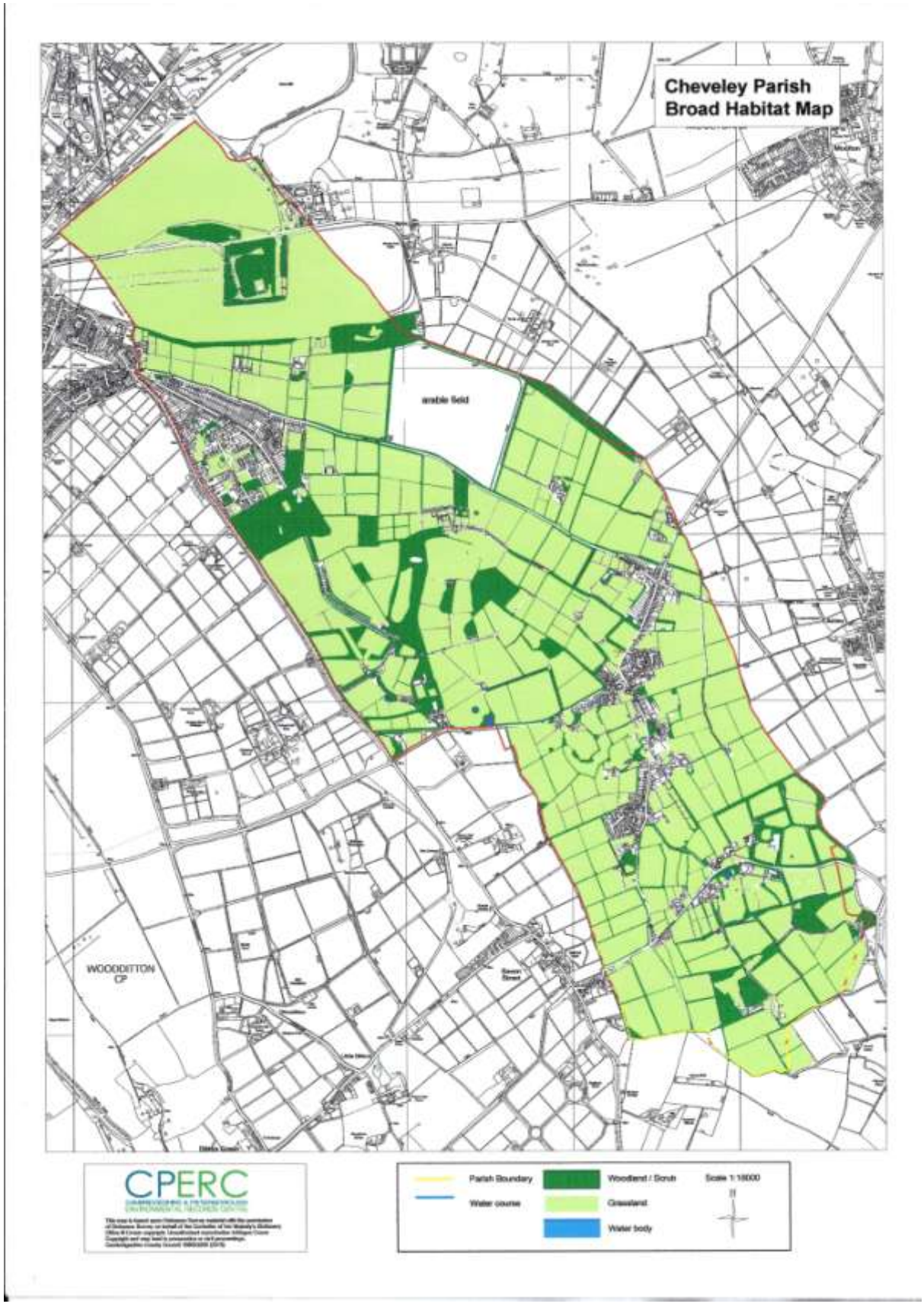



Cheveley Parish (North)
Phase 1 Habitat Map (1990's)
CPERC
CAMBRIDGESHIRE & PETERBOROUGH ENVIRONMENTAL RECORDS CENTRE
Woodland & Scrub
Broad-leaved semi natural
Broad-leaved plantation
Mixed plantation
Mixed semi natural
Coniferous plantation
Other
Water
Arable land
Grassland
Unimproved / Semi-improved
Poor semi-improved
Improved
Tall ruderal
Calcareous unimproved
Amenity
Parish boundary
Line of trees
Native spp rich hedge
Water course
Scale 1:11000


Cheveley Parish (Centre)
Phase 1 Habitat Map (1990's)
CPERC
CAMBRIDGESHIRE & PETERBOROUGH ENVIRONMENTAL RECORDS CENTRE
Woodland & Scrub
Broad-leaved semi natural
Broad-leaved plantation
Mixed plantation
Mixed semi natural
Coniferous plantation
Other
Water
Arable land
Grassland
Unimproved / Semi-improved
Poor semi-improved
Improved
Tall ruderal
Calcareous unimproved
Amenity
Parish boundary
Line of trees
Native spp rich hedge
Water course
Scale 1:13000


Cheveley Parish (South)
Phase 1 Habitat Map (1990's)
Ashley
Saxon Street
CPERC
CAMBRIDGESHIRE & PETERBOROUGH ENVIRONMENTAL RECORDS CENTRE
Woodland & Scrub
Broad-leaved semi natural
Broad-leaved plantation
Mixed plantation
Mixed semi natural
Coniferous plantation
Other
Water
Arable land
Grassland
Unimproved / Semi-improved
Poor semi-improved
Improved
Tall ruderal
Calcareous unimproved
Amenity
Parish boundary
Line of trees
Native spp rich hedge
Water course
Scale 1:13000

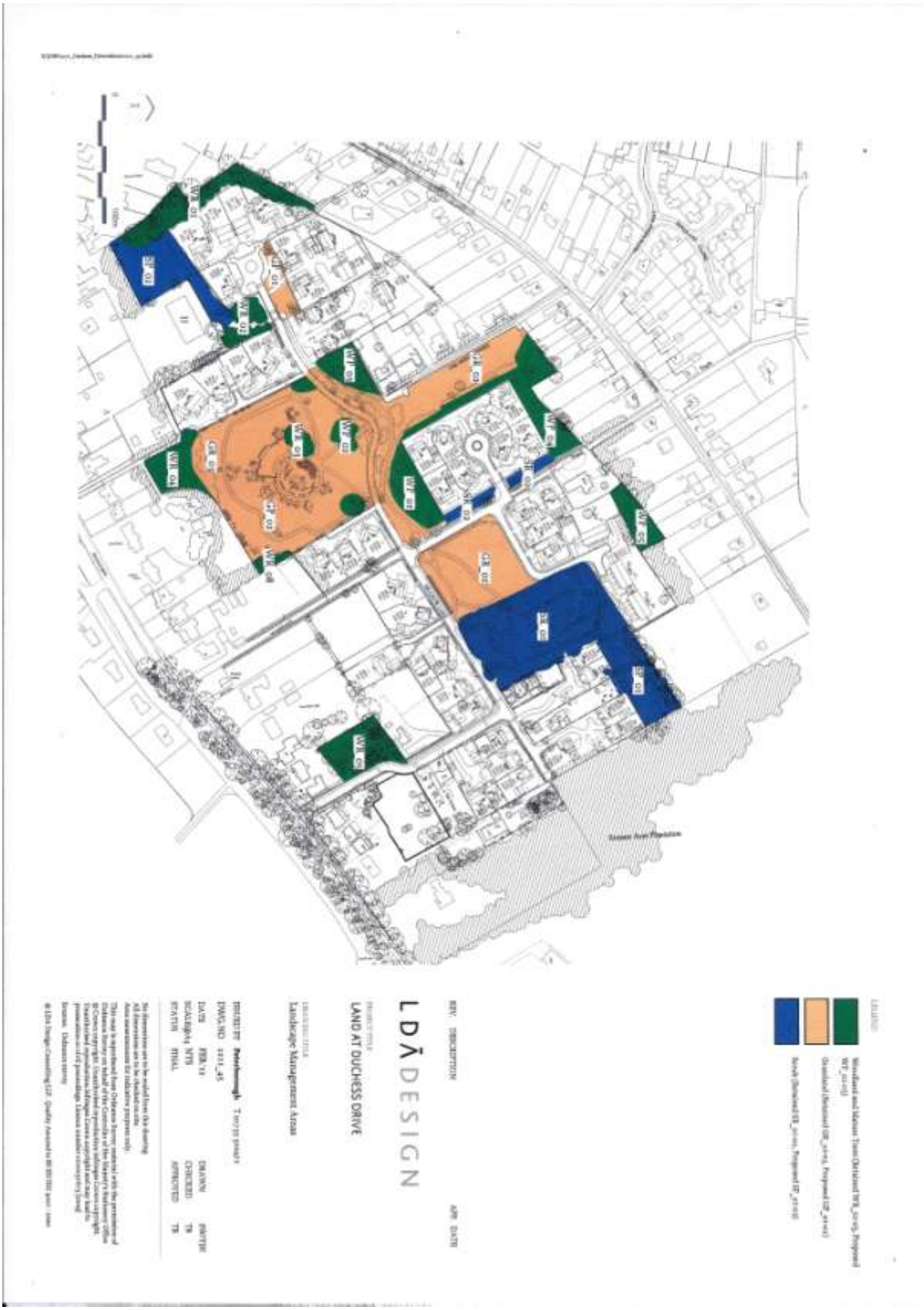
Appendix 4 – Habitat map 2016



Appendix 5 - Results of Garden Survey

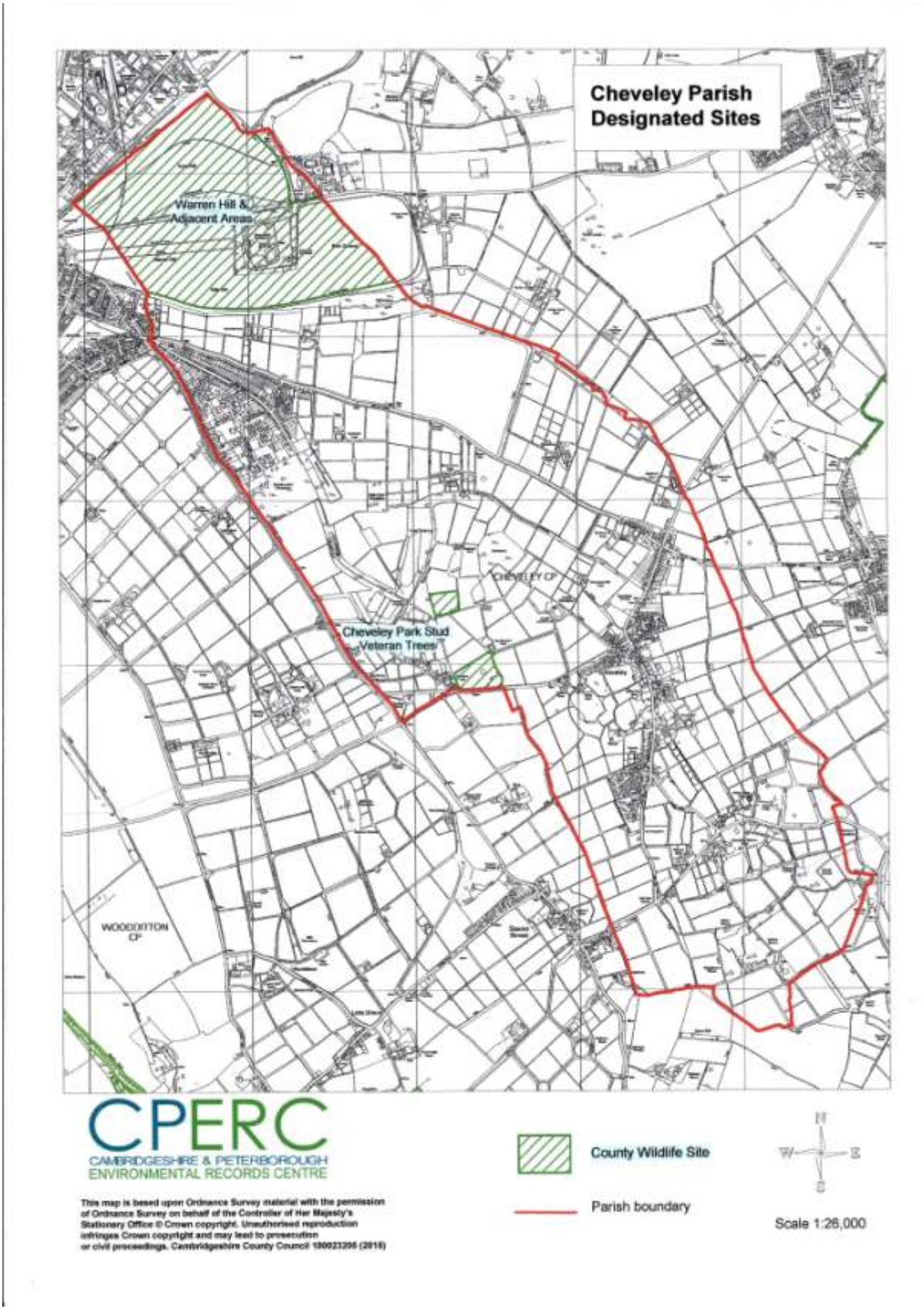
Number of survey forms distributed	950		
Number returned	89	9.4%	
Of those returned:			
Number with **map reference** (and/or address)	72	80.9%	
Number with name	82	92.1%	
Number who might assist / join the biodiversity group	5		
Number reporting:			
Frogs	51	57.3%	
Toads	30	33.7%	
Newts	14	15.7%	
Dragonflies	41	46.1%	
Grass snake	0		
Adder	0		
Slow Worm	1		
Common Lizard	4		
Bats	39	43.8%	
Owls	44	49.4%	Heard or seen
Song Thrush	58	65.2%	
House Sparrow	68	76.4%	
Cuckoo	21	23.6%	Heard or seen
Hedgehogs	44	49.4%	Animals, droppings or dead on road
Hares	12	13.5%	
Old orchard or very old trees	14	15.7%	

Appendix 6 – Duchess Park site plan showing public spaces



Appendix 7 – Jarman centre schematic site plan

Appendix 8 – County Wildlife Sites



EAST CAMBRIDGESHIRE DISTRICT COUNTY WILDLIFE SITES REGISTER
Site No. 7514
COUNTY WILDLIFE SITE FULL RECORD SHEET
NAME: **Cheveley Park Stud veteran trees**
File code: E/NEW/14.2.02
Parish(es): Cheveley
County: Cambridgeshire
Grid ref.: TL672614
Habitat information
Code Habitat type
A31 Parkland/scattered trees: broad-leaved
B6 Grassland: poor semi-improved
B42 Grassland: improved/reseeded, lowland
G11 Open water: standing, eutrophic
Site Area
6.70 ha
Site description
A group of veteran trees and associated habitat features within Cheveley Park Stud. Much of the woodland and avenues of trees are of more recent origin, but some of avenues contain old English Oaks Quercus robur and Common Lime *Tilia platyphyllos*, with significant amounts of dead wood, scars and hollowing. Several outlying veteran trees occur in two of the paddocks and include both English Oak *Quercus robur* and Beech *Fagus sylvatica*. Associated habitats include woodland belts, ponds and improved / semi-improved grassland. Further survey of these associated habitats is required.
Site assessment
This site is proposed as a County Wildlife Site because it contains more than 5 veteran trees in association with other semi-natural habitat.
Site status
County Wildlife Site
Surveyor
Pete Stroh
14/02/2002
Cheveley Park Stud veteran trees

EAST CAMBRIDGESHIRE DISTRICT COUNTY WILDLIFE SITES REGISTER
Site No. 7338/2
COUNTY WILDLIFE SITE FULL RECORD SHEET
NAME: **Warren Hill and adjacent areas**
File code: E/11.7.05
Parish(es): Cheveley
County: Cambridgeshire
Grid ref: TL6563

Habitat information

Code Habitat type

A112 Woodland: broadleaved, plantation
A132 Woodland: mixed, plantation
A31 Parkland/scattered trees: broad-leaved
B22 Grassland: neutral, semi-improved
B31 Grassland: calcareous, unimproved
B32 Grassland: calcareous, semi-improved
B6 Grassland: poor semi-improved
CG03a *Bromus erectus* grassland: Typical subcommunity
CG03c *Bromus erectus* grassland: *Knautia arvensis-Bellis perennis*
MG05 *Cynosurus cristatus-Centaurea nigra* grassland

Site area

139.94 ha

Site description

A large expanse of unenclosed neutral and calcareous grassland used for racehorse training. A typical calcareous grassland flora occurs over extensive areas of the site, generally as mosaic of unimproved grassland with more improved and disturbed grasslands. The main calcareous grassland communities present are CG3a and CG3c (as determined by English Nature survey in the late eighties). The site is managed by frequent mowing.

The eastern side of Long Hill together with the areas directly south and east of Warren Hill Plantation are the most botanically rich parts of the site. Typical flora in these areas comprises abundant Upright Brome *Bromopsis erecta*, frequent Red Fescue *Festuca rubra agg*., Smaller Catstail *Phleum bertolonii*, Common Bent *Agrostis capillaris*, Creeping Bent *Agrostis stolonifera* Lady's Bedstraw *Galium verum*, Common Knapweed *Centaurea nigra*, Clover *Trifolium repens*, Red Clover *Trifolium pratense*, Restharrow *Ononis repens*, Ribwort Plantain *Plantago lanceolata*, Salad Burnet *Sanguisorba minor*, Yarrow *Achillea millefolium*. More occasional species include Greater Knapweed *Centaurea scabiosa*, Agrimony *Agrimonia eupatoria*, Rough Hawkbit *Leontodon hispidus*, Wild Carrot *Daucus carota*, Dwarf Thistle *Cirsium acaule*, Hoary Plantain *Plantago media*, Fairy Flax *Linum catharticum*, Dropwort *Filipendula vulgaris*, Toadflax *Linaria vulgaris*, Wild Mignonette *Reseda lutea*.

Surveys in the 1980s indicate some areas on the site supported species typical of more acidic conditions, the county rarity Heather *Calluna vulgaris* was one such species recorded. No such areas or species were observed in the current survey. Historically, The Warren Hill Reservoir at TL662635 has supported a floristically diverse chalk grassland on its capping which is managed by mowing. Species recorded in this area from surveys conducted in the 1980's include Kidney Vetch *Anthyllis vulneraria*, Quaking Grass *Briza media*, Autumn Gentian *Gentianella amarella*, Pyramidal Orchid *Anacamptis pyramidalis*, Self Heal *Polygala vulgaris* and the county rarity Bloody Cranesbill *Geranium sanguineum*. This reservoir area is presently entirely fenced off, and therefore access was not possible during the current survey.

Site assessment

The site qualifies as CWS because it supports at least 0.05ha of CG3 Upright Brome grassland; because it supports frequent numbers of at least six strong calcareous grassland indicator species; because it supports a population of a Nationally Scarce vascular plant species and because it supports a population of a vascular plant species rare in the county (Bloody Cranesbill *Geranium sanguineum*).

Site status
County Wildlife Site
former Site of Natural History Interest
EN Grassland Inventory
Surveyors
Alastair Ross
Emma Ogden
11/07/2005

Appendix 9 – Tree Preservation Orders (Page 1)

TREE PRESERVATION ORDERS: DETAILS FOR CHEVELEY PARISH

TPO REF			LOCATION	TREES(T)	TOTAL NO. SINGLE TREES	GROUPS(G)	TOTAL NO. INDIVIDUAL GROUPS	TOTAL NO. TREES IN GROUP	WOODS(W)	TOTAL NO. WOODS	AREAS(A)	TOTAL NO. AREAS
E	No.	Year			87		30	227		5		1
E	3	2003	Centre Drive 108	T1-2 Lime	2							
E	2	2003	Centre Drive 116	T1 Lime	1							
E	2	2003	Centre Drive 116	T2 Lime	1							
E	2	2003	Centre Drive 116	T3 Oak	1							
E	2	2003	Centre Drive land opp 116			G1 Lime	1	6				
E	2	2003	Centre Drive land opp 116			G1 Oak		3				
E	1	2002	Duchess Drive 117 Dingley Dell	T1,2,10,12 Sycamore	4				W1 Larch Beech Sycamore mixed woodland	1		
E	1	2002	Duchess Drive 117 Dingley Dell	T3,4 Larch T5,6,7,8,9 Beech T11 English Oak	2							
E	1	2002	Duchess Drive 117 Dingley Dell		5							
E	1	2002	Duchess Drive 117 Dingley Dell	T1 Deodar	1							
E	5	2002	Duchess Drive 81 land at Centre Drive land at 60 & 62 (replaced with E/25/99)	Cedar	1							
E	22	1999										
E	25	1999	Duchess Drive/Centre Drive land between.	T1,2,6 Oak	3	G1 Pine	1	4	W1 Larch Scots Pine Beech Salix spp Prunus spp	1		
E	25	1999	Duchess Drive/Centre Drive land between.	T3,7,23 Lime T4,8,10,19,22 Ash	5	G1 Cherry		4				
E	25	1999	Duchess Drive/Centre Drive land between.			G1 Birch		12				
E	25	1999	Duchess Drive/Centre Drive land between.	T5,9,25 Beech	3	G1 Beech		1				

Appendix 9 continued – Tree Preservation Orders (Page 2)

| | | |

Appendix 9 continued – Tree Preservation Orders (Page 3)

E	25	1999	Duchess Drive/Centre Drive land between.				G5 Birch	6		
E	25	1999	Duchess Drive/Centre Drive land between.				G5 Beech	1		
E	25	1999	Duchess Drive/Centre Drive land between.				G5 Ash	2		
E	25	1999	Duchess Drive/Centre Drive land between.				G5 Willow	1		
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Sorbus	1	2	
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Birch		10	
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Field Maple		2	
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Pine		3	
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Willow		4	
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Oak		2	
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Cherry		2	
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Ash		3	
E	25	1999	Duchess Drive/Centre Drive land between.				G6 Beech		2	
E	25	1999	Duchess Drive/Centre Drive land between.				G7 Hawthorn	1	22	
E	25	1999	Duchess Drive/Centre Drive land between.				G8 Field Maple	1	2	
E	25	1999	Duchess Drive/Centre Drive land between.				G8 Cherry		2	
E	25	1999	Duchess Drive/Centre Drive land between.							
E	8	1998	Ashley Road land adj 34			T1,2,3,4,5	Lime	5		
E	8	1998	Ashley Road land adj 34			T6	Holly	1		
E	8	1998	Ashley Road land adj 34			T7,8,9,10	Birch	4		
E	8	1998	Ashley Road land adj 34			T11	Larch	1		
E	9	1998	Centre Drive land at 1			T1	Lime	1		
E	16	1998	Duchess Drive 21 & 23				G1 Lime	1	6	

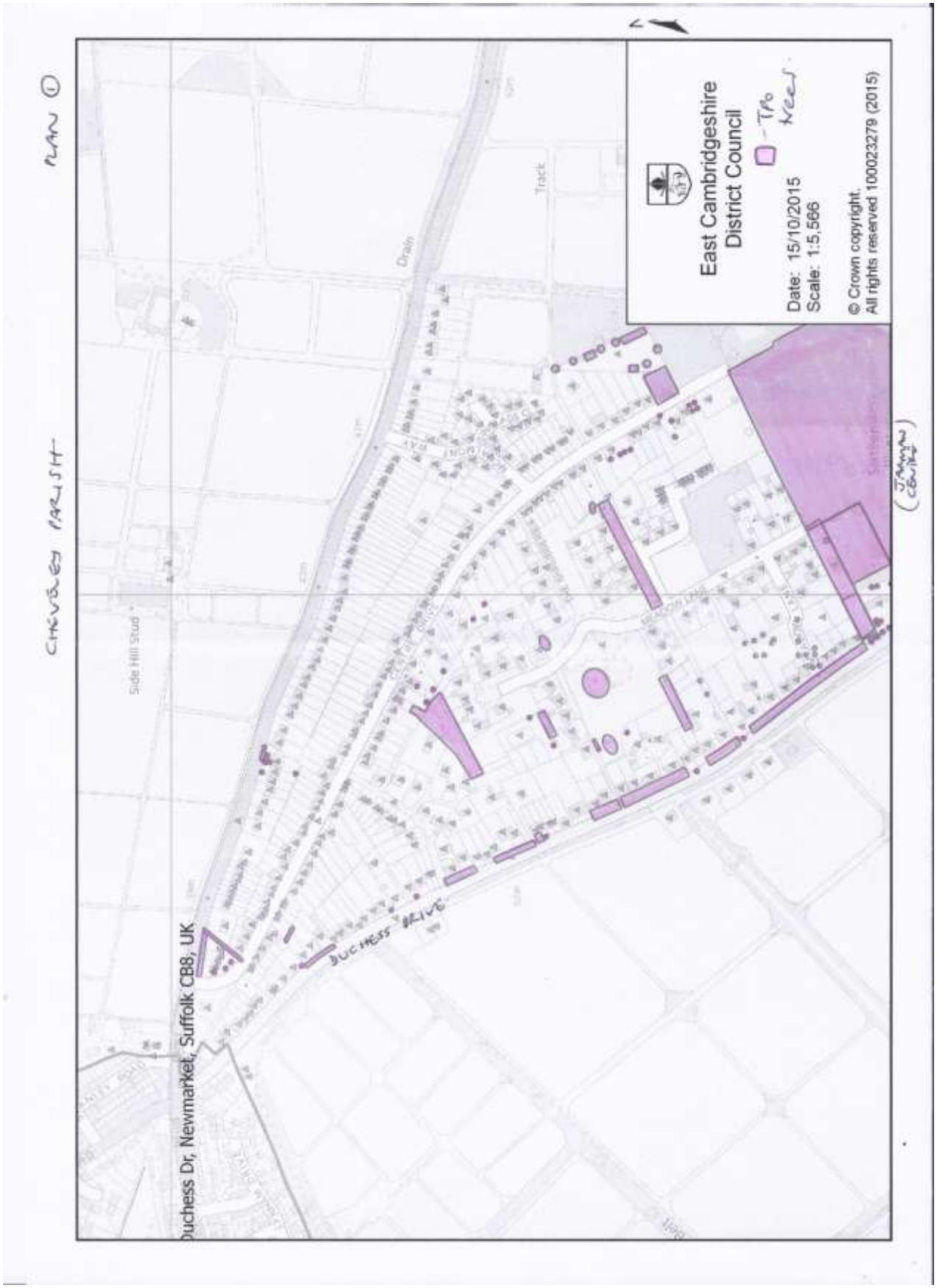
Appendix 9 continued – Tree Preservation Orders (Page 4)

| | | |

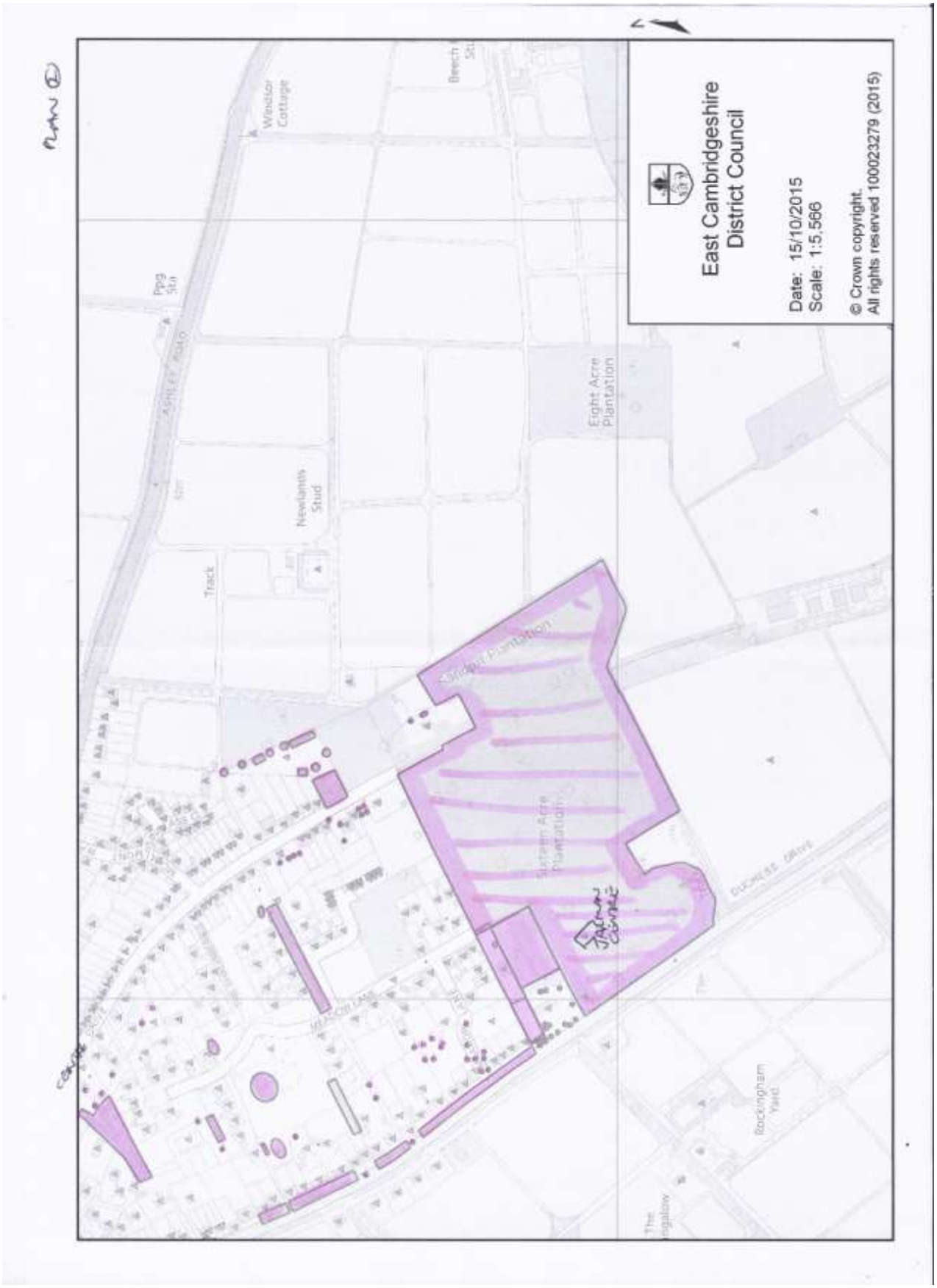
Appendix 9 continued – Tree Preservation Orders (Page 5)

E	4	1958	Duchess Drive land at			G14 Beech	1	5			
E	4	1958	Duchess Drive land at			G14 Oak		4			
E	6	2010	Land east of 127 to 139 Centre Drive, Newmarket	T1-T4 Lime	4	G1 Lime	1	4			
E	6	2010	Land east of 127 to 139 Centre Drive, Newmarket	T5 Pine	1	G2 Lime	1	5			
E	6	2010	Land east of 127 to 139 Centre Drive, Newmarket	T6 Walnut	1	G3 Pine	1	2			
E	6	2010	Land east of 127 to 139 Centre Drive, Newmarket								
E	3	2006	Sixteen Acre Plantation including The Jarmain Centre, Duchess Drive						W1 mixed woodland including Sycamore, Lime, Oak, Beech, Field Maple, Ash, Rowan, Silver Birch, Horse Chestnut, Larch	1	
E	6	1998	High Street land at 39	T1,2 Apple	2						
E	13	1998	Newmarket Rd 18 Old Garage Site	T1 Beech	1						
E	13	1991	High Street r/o 40			G1 Ash Oak					
						Hawthorn	1				
						Field Maple					
E	23	1985	Spurling Close/Little Green land at			G1 Sycamore	1	3			
E	2	1979	Broomstick Corner land at	T1 Scots Pine	1						
E	2	1979	Broomstick Corner land at	T3,5 Beech	2						
E	2	1979	Broomstick Corner land at	T4,6 Oak	2						

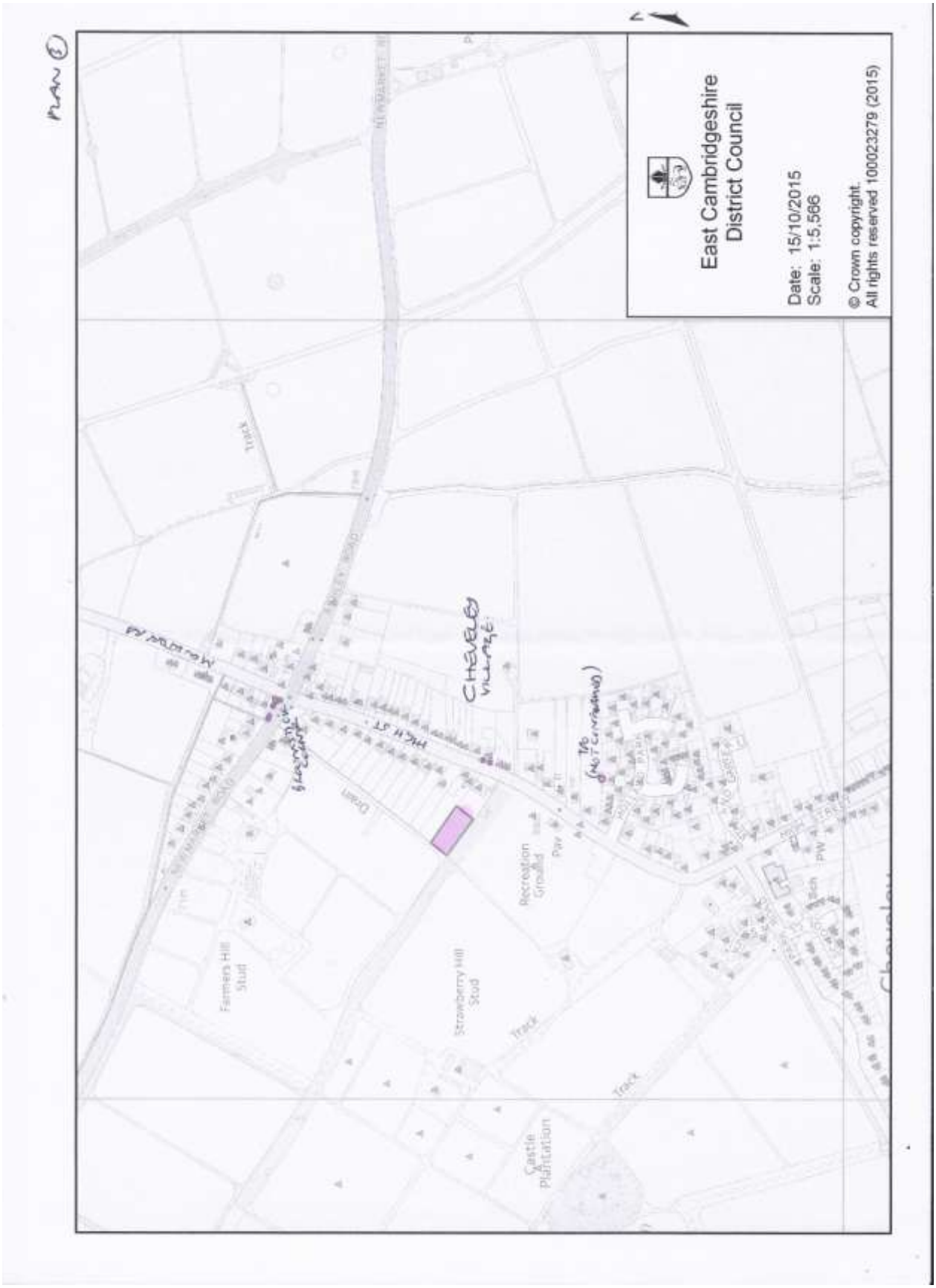
Appendix 9 continued – Tree Preservation Orders (Plan 1)



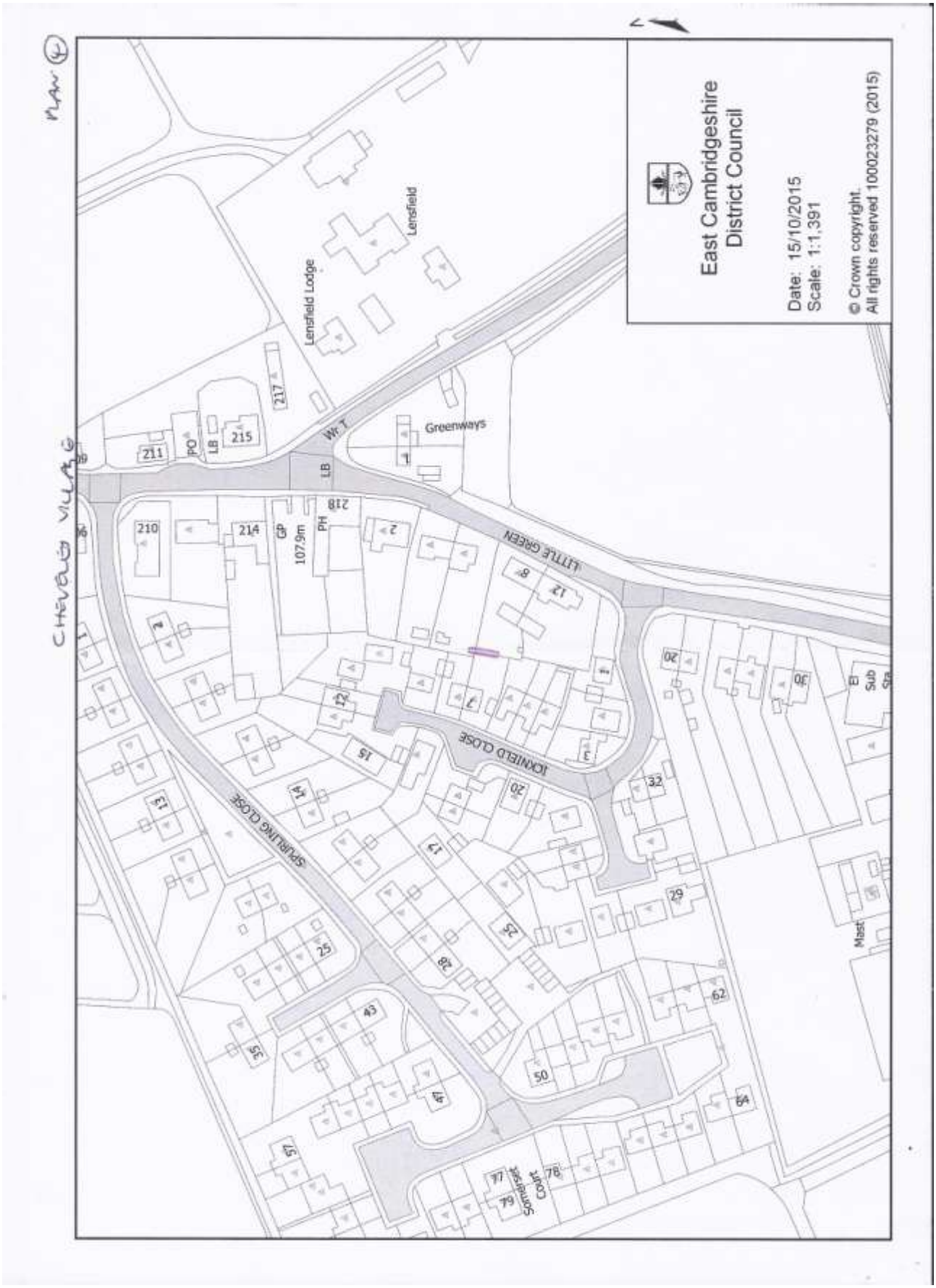
Appendix 9 continued – Tree Preservation Orders (Plan 2)



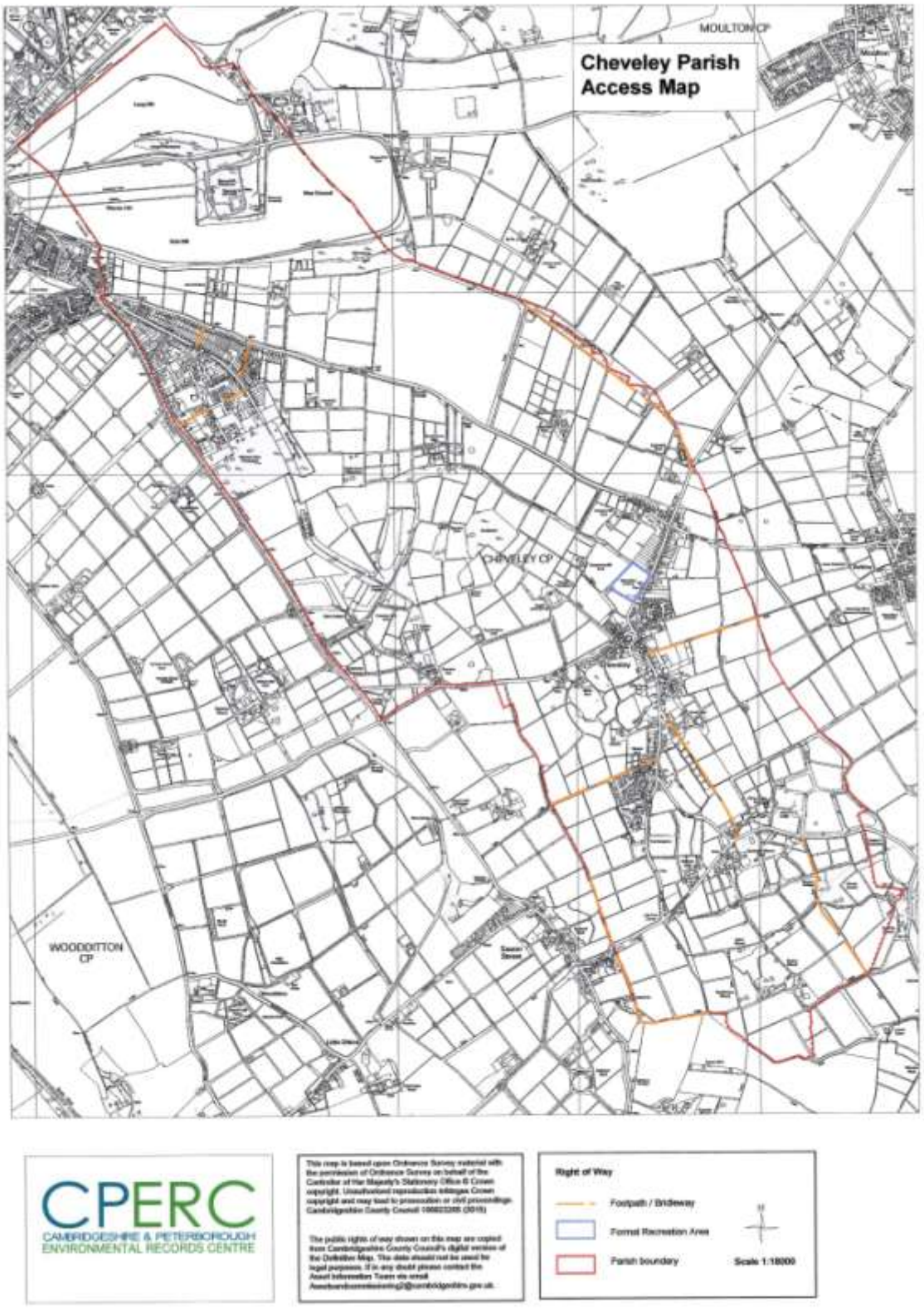
Appendix 9 continued – Tree Preservation Orders (Plan 3)



Appendix 9 continued – Tree Preservation Orders (Plan 4)



Appendix 10 – Access (footpaths and bridleways)



Appendix 11 – letter sent to all studs in Cheveley Parish

Cheveley Parish Biodiversity Group
c/o David Cudby
14 Meadow Lane
Newmarket
CB8 8FZ

Tel: 01638 669964
Email: davidcudby@btinternet.com

26th February 2016

Dear Stud Manager, **Cheveley Parish Biodiversity Group**

I would like to introduce The Cheveley Biodiversity Group. We formed following an invitation by Cheveley Parish Council to compile information about the habitats and wildlife of the area. We are volunteers. We are all enthusiasts for wildlife and the environment. Our knowledge and expertise is varied and wide ranging. To strengthen the group we work closely with the Wildlife Trust and expert wildlife recorders. We would welcome the involvement of the Studs in the work of The Group.

We have undertaken a number of initiatives including a garden wildlife survey where we invited every household in the Parish to report their sightings of a range of critical indicator species, some of which are known to be in decline nationally. We have undertaken specific public space site surveys with the help of acknowledged wildlife recorders who have specific knowledge and skills. We are planning further site specific survey work.

The data produced by our work is being recorded by The Cambridgeshire and Peterborough Environmental Records Centre for future reference and the benefit of future generations. This is particularly important as the biodiversity of the Cheveley Parish area of Cambridgeshire is not well recorded at present.

This letter is being sent to all those Stud Managers who have land within The Parish. My purpose in writing to you is to recognise and acknowledge the extent and the value of the habitats owned and managed by the Studs. It is clear from the great views from roads and public footpaths just how interesting the habitats are. Of particular interest are the wooded areas and the hedgerows. Existing maps from the 1990s and tools like Google Earth show just how extensive and interconnected the woodland and hedgerows are, many extending across Stud Boundaries.

The chalky grassland typical of the area almost certainly supports important flora and butterflies, moths and other insects. Cheveley Parish has relatively few watercourses, lakes and ponds both natural and manmade. Those that do exist are mostly within the Studs and are important well established local habitats supporting birds, amphibians, reptiles and invertebrates.

The care and attention that goes in to Stud management has resulted in areas of great importance to local wildlife and Stud Owners are to be congratulated for that. That care and attention to land use is undoubtedly benefitting wildlife. The blend of local geology, history, and the paddocks and wooded areas combine to generate a unique habitat characteristic of areas around Newmarket but rarely found elsewhere. We would like to offer the services of The Biodiversity Group and its links to wildlife experts. Working together we could suggest small changes to benefit wildlife management and biodiversity.

We would very much like to include the habitats within the Studs as we write up our findings. With that in mind we would welcome any help that you can give us. For example:

- Copies of existing promotional material that shows the kind of land management and the habitat generated
- Links to relevant website material, for example demonstrating industry best practice
- Examples of work undertaken by Studs with wildlife benefits specifically in mind
- Planned future habitat enhancements
- Opportunities for collaboration with The Biodiversity Group or Wildlife Trust
- Sharing your formal or anecdotal records of wildlife sightings
- An interview with a member of the Biodiversity Group, or even a site visit

It is with future generations of wildlife and people that I have written to ask for your help and I look forward to hearing from you. We will of course respect all commercial and security sensitivities.

Yours sincerely,

David Cudby (on behalf of Cheveley Parish Biodiversity Group)

Appendix 12 – Examples of Cheveley Parish wildlife records held by Cambridgeshire and Peterborough Environmental Records Centre (CPERC)

The table below contains some selected columns from just the first 100 records. There are currently 3600 records in total.

Taxon_group	Latin_Name	Common_Name	Location	1km_Square	Grid_Ref	Date	Abundance
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6662	TL661623	12-05-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6860	TL683609	May-15	1 Count
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6861	TL684610	Mar-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6662	TL662622	12-07-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6860	TL684609	May-15	1 Count
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6860	TL684605	30-03-15	1 Count
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6860	TL685605	Jun-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6861	TL684612	Jun-15	1 Count
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6860	TL683601	May-15	3 Count
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6861	TL683617	2015	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6861	TL683611	Apr-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6562	TL658628	2013	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6662	TL661626	May-15	1 Count
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6662	TL660627	May-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6662	TL660627	Jun-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6662	TL661626	03-06-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6662	TL660626	2015	2 Count
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6960	TL691600	17-03-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6562	TL65666263	12-06-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6760	TL677608	17-03-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6861	TL683611	Jun-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6660	TL669607	2015	
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6860	TL68326023	Apr-15	1 Count
amphibian	*Bufo bufo*	Common Toad	Cheveley	TL6861	TL68446146	May-15	
amphibian	*Bufo bufo*	Common Toad	Cheveley Park	TL6760	TL672609	Jun-15	2 Count
amphibian	*Lissotriton helveticus*	Palmate Newt	Cheveley	TL6860	TL683601	May-15	3 Count
amphibian	*Lissotriton vulgaris*	Smooth Newt	Cheveley	TL6861	TL685615	12-06-15	1 Count

Taxon_group	Latin_Name	Common_Name	Location	1km_Square	Grid_Ref	Date	Abundance
amphibian	*Lissotriton vulgaris*	Smooth Newt	Cheveley	TL6861	TL685615	01-06-15	1 Count
amphibian	*Lissotriton vulgaris*	Smooth Newt	Cheveley	TL6861	TL683611	Apr-15	
amphibian	*Lissotriton vulgaris*	Smooth Newt	Cheveley	TL6861	TL682611	Jun-15	
amphibian	*Lissotriton vulgaris*	Smooth Newt	Cheveley	TL6562	TL65666263	28-05-15	
amphibian	*Lissotriton vulgaris*	Smooth Newt	Cheveley	TL6860	TL684608	May-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL662626	Jul-15	2 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL661623	10-06-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL683609	May-15	1 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL661625	May-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL684610	2015	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL683609	2014	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL684609	2015	6 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL685615	12-06-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL684605	Mar-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL685605	Jun-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL684612	2015	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL685615	13-06-15	4 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL683601	May-15	5 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL684614	09-06-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL683611	Mar-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL683612	May-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL661626	05-07-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL660627	May-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL660627	Jun-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL661626	20-06-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL682611	May-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL660625	May-15	2 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6562	TL65666263	12-06-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL68446124	10-06-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL662625	Apr-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL660621	2014	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL685617	2015	

Taxon_group	Latin_Name	Common_Name	Location	1km_Square	Grid_Ref	Date	Abundance
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL684608	17-03-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL682602	2014	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL683611	Jun-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6662	TL66176271	2014	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6660	TL669607	2015	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6861	TL68446146	Jun-14	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL68426076	Apr-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL68326023	May-15	2 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6562	TL659627	12-06-15	
amphibian	*Rana temporaria*	Common Frog	Cheveley	TL6860	TL684608	18-06-15	1 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley Park	TL6760	TL672609	Jun-15	2 Count
amphibian	*Rana temporaria*	Common Frog	Cheveley Park	TL6760	TL67186089	May-15	
amphibian	*Rana temporaria*	Common Frog	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Acanthis cabaret*	Lesser Redpoll	Duchess Park, Cheveley	TL6562	TL6562	Mar-11	
bird	*Acanthis cabaret*	Lesser Redpoll	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Accipiter nisus*	Sparrowhawk	Cheveley	TL6861	TL685616	2015	
bird	*Accipiter nisus*	Sparrowhawk	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Aegithalos caudatus*	Long-tailed Tit	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Aegithalos caudatus*	Long-tailed Tit	Longholes Stud, Cheveley	TL6862	TL680626	29-03-09	2 Count
bird	*Alauda arvensis*	Skylark	Cheveley	TL6861	TL686613	12-03-15	
bird	*Alauda arvensis*	Skylark	Cheveley	TL6663	TL668633	12-03-15	
bird	*Alauda arvensis*	Skylark	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Anas platyrhynchos*	Mallard	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Anatidae*	Ducks, geese, swans	Duchess Park, Cheveley	TL6562	TL6562	Nov-11	
bird	*Anatidae*	Ducks, geese, swans	Duchess Park, Cheveley	TL6562	TL6562	11-03-12	
bird	*Apus apus*	Swift	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Ardea cinerea*	Grey Heron	Cheveley	TL6860	TL684608	2015	
bird	*Athene noctua*	Little Owl	Cheveley	TL6861	TL685616	Jun-15	1 Count
bird	*Athene noctua*	Little Owl	Cheveley	TL6563	TL659630	29-03-01	1 Count
bird	*Athene noctua*	Little Owl	Cheveley	TL6859	TL685595	09-06-15	1 Count
bird	*Athene noctua*	Little Owl	Cheveley Park	TL6760	TL67186089	2014	

Taxon_group	Latin_Name	Common_Name	Location	1km_Square	Grid_Ref	Date	Abundance
bird	*Athene noctua*	Little Owl	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Buteo buteo*	Buzzard	Banstead Manor Stud, Cheveley footpath	TL6959	TL6959	16-03-15	
bird	*Buteo buteo*	Buzzard	Cheveley	TL6860	TL6860	30-04-08	2 Count
bird	*Buteo buteo*	Buzzard	Cheveley	TL6860	TL6860	21-07-13	3 Count
bird	*Buteo buteo*	Buzzard	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Buteo buteo*	Buzzard	Sixteen Acre Plantation, Cheveley	TL6662	TL662620	30-05-12	
bird	*Carduelis carduelis*	Goldfinch	Cheveley	TL6662	TL661626	Jun-15	
bird	*Carduelis carduelis*	Goldfinch	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	
bird	*Chloris chloris*	Greenfinch	Duchess Park, Cheveley	TL6562	TL6562	2010 - 2012	