TIDGROVE WARREN FARM

MANAGEMENT PLAN 2014-2024

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Prepared for Raleigh Place Associates

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Contents

Appendices

1. 0 Introduction

Tidgrove Warren Farm is situated within the North Wessex Downs Area of Outstanding Natural Beauty (AONB). The Farm is located 5 miles (7.5km) to the west of Basingstoke, between the villages of Overton and Kingsclere. The area is situated on chalk downland (institute of Geological Sciences, 1979) and is an important site for biodiversity. The site is also well known for the large amount of evidence for human occupation from Neolothic onwards. Bronze Age barrows are located on the high ground immediately to the north of Tidgrove Warren Farm (Strutt, 2006).

1.2 Archaeology

Remnants of Iron Age settlement and land enclosure are demonstrated by traces of extensive Celtic field systems, which divide the downland into terraces and fields. These features are visible as slight earthworks and soil marks, distinguished by the brown loam and white chalk of the local geology. An advanced network of settlement and trade has been suggested for the area in the Roman period (Cusworth and Dobbs, 1999), which included a road system running from the south coast towards Silchester (Fulford and Timby, 2000). In the locality of Tidgrove Warren Farm, a continuity of settlement and farming is suggested by the existence of ceramic remains, dating from the 1st century BC to 4th century AD.

In the medieval period much of the down was converted either to sheep grazing or warrening of rabbits, or for hunting. This latter use appears to be the case with the land around Tidgrove Warren Farm. The land to the south of Overton was used by the Bishop of Winchester for sheep grazing (Strutt, 2006) and King Henry II is recorded as having built a hunting lodge and stables at Freemantle, near the line of the Roman Portway road. A number of 17th and 18th century maps also attest to the widespread existence of parkland. Spede's map of 1610 shows ten such parks in the north of Hampshire, and Kitchin's map of 1750 delineates a deer pale, which encircles the area around Tidgrove Warren Farm and marks it as *Tremanton Park,* which is possibly a corruption of *Freemantle*.

Figure 1. Site of medieval hunting lodge.

In the 1920s, Mr. Bull, a Kingsclere schoolmaster, observed, in a corn crop, the outline of a large enclosure which he thought to be Roman. The existence of this enclosure was confirmed by aerial photography. When compared with other medieval hunting lodges such as Writtle in Essex, it was clear that this could indeed be the site of Henry II's buildings.

Current interest in the archaeology of Tidgrove Warren was initiated by members of the Kingsclere Heritage Association, and the landowner and resident of Tidgrove Warren Farm, Mr Raleigh Place. The landowner has found a number of concentrations of ceramic material including 12th – 13th century pottery, and 1st century BC to 4th century AD ceramics to the west o9f the present farm, within the bounds of the Iron Age field system (Strutt, 2006).

In 2003, under the direction of Kristian Strutt and Professor David Hinton, volunteers from the KIngsclere Heritage Association and the landowner, investigations of the medieval lodge site revealed a ditched inclosure, with a significant cellar. This structure probably had a stone barrel-vaulted roof with buildings above it. They also located evidence for a Romano-British farmstead on the ridge to the west of the modern farm.

Peter Woodman of the Kinsclere Heritage Association, states that the medieval settlement was built in 1172 as a stopping place for King Henry II on his journeys to and from his land in France. It was later used by King Richard I and King John, before being demolished in about 1252.

Tidgrove Warren Farm was used for grazing by sheep until about the 1940s.The site was acquired by the current landowner Mr Raleigh Place in 1976. Originally the site was cropped with predominately spring barley until 1974. At that time the farm entered into a HAB scheme and since then the area has been gradually restored to benefit a wide variety of flora and fauna, particularly Stone Curlew, which the site was noted for.

Tidgrove Warren Farm entered into a 10 year Higher Level Stewardship agreement with Natural England in September 2014.

1.3 Recent and current Management

Much of the grassland at this site has been allowed to return to scrub with a combination of Hawthorn, Blackthorn, Privet, Hazel and Dogwood. It will be important not to allow these areas to become too dense with degenerate thorn and to allow a combination of older mature scrub, areas of rotational scrub, light scrub as well as calcareous grassland. In the areas of lighter and rotational scrub it is hoped that species such as the Duke of Burgundy will be able to colonise, the larva feeding on Primulas which will become more abundant in the sward.

Mature Birch and Sycamore trees have been felled helping to prevent the spread of seedlings that would lead to these species becoming dominant.

It is hoped that Juniper will be introduced. Juniper trees will also need to be protected by cattle and sheep. Seed cages may need to be introduced in the immediate vicinity of the berry bearing female Juniper trees to assist regeneration. The areas where the cages are placed will be cleared revealing some bare soil, so that any berries which fall in these areas will have a greater chance of germinating and growing without being shaded out by grasses and also protected from cattle, sheep and rabbits.

The mature hedges that surround the site are a very valuable habitat and could be enhanced with the introduction of disease resistant Elm trees.

1.4 Landscape Assessment

Tidgrove Warren Farm consists of a series gently sloping areas of chalk grassland, prominent areas of scrub and partially wooded margins.

The ambience of the site is enhanced by the presence of many archaeological features, such as the remains of the medieval hunting lodge. In the summer months, the area is warm place alive with birdsong, flowering plants and seas of swaying grasses. In the autumn the character changes with the scrub and the abundance of berries offering a contrast to the open grassland. Although during the winter months, Tidgrove Warren can be bleak and exposed, it is a valuable source of food for overwintering birds such as Short Eared Owls.

1.5 Biological Evaluation

The property is noted as an important site within Hampshire for its butterflies and chalk grassland communities which are supported through various stages of development as well as for its mixed scrub habitat which is particularly important for bird species such as Turtle Dove and winter visitors. Butterfly species recorded in recent years include Brown Argus, Small Blue, Green Hairstreak and Dark Green Fritillary (see Appendix 1 for full list of Lepitoptera recoded). It is possible, with suitable habitat management, that other chalk grassland species such as Chalk-hill Blue, Adonis Blue and Silver Spotted Skipper, may colonise the site from other near-by localities in Hampshire.

The chalk grassland flora has undergone changes with rabbit grazing, drought summers, sheep grazing and scrub clearance. However in general the calcareous grassland has remained herb rich (see Appendix 3 for list of flora present). The presence of scrub communities and woodland edge also provide a valuable habitat for birds and invertebrates. Tidgrove Warren Farm has a rich avifauna which includes Skylark, Garden Warbler, Kestrel, Long-eared Owl, Bullfinch and Whitethroat.

Figures 2, 3 and 4. Dark Green Fritillary (top left) and Marbles White (top right), tow familiar butterfly species at Tidgrove. Nemophora metallica on Field Scabious at Tidgrove (above).

Figure 5. The landscape at Tidgrove Warren which includes a rich mosaic of chalk grassland, various age classes of scrub and woodland.

2.0 Management Objectives

2.1 Natural History

Broadly speaking, Tidgrove Warren Farm can be split into three habitat types: chalk grassland, scrub and woodland.

2.2 Chalk Grassland

Chalk grassland comprises some of the most species-rich habitat in lowland England.

Where possible, use livestock to manage sward heights in preference to cutting. Correct management will allow and encourage more plants to flower over the summer months. Sheep selectively graze flower heads so in the spring it is best to graze with other stock.

Chalk grassland in April and May should support early perennial flowers such as Cowslip and Early Purple Orchid, and small annuals such as Early Forget-me-not and Rue-leaved Saxifrage. Nectar and pollen are scare in the spring so flowers are particularly valuable to bumblebees, solitary bees and butterflies such as the Grizzled

Skipper and the scarce Duke of Burgundy. This includes the flowers of shrubs such as Blackthorn, Hawthorn and Sallow.

Generally, the site should aim for:

- A fairly short sward (5-10cm tall) over most of the site.
- Taller clumps of vegetation (15-30cm tall) on up to a third of the area.
- Small areas (2-5%) of bare ground.
- Scattered scrub surrounded by taller herbage.

Figures 6 & 7. An example of a herb-rich sward (above) including species such as Bird's foot trefoil. Chalk grassland in summer (below) with Clustered Bellflower, Scabious and Hawkbits.

Figure 8. Fragrant Orchid amongst chalk grassland at Tidgrove Warren Farm.

Chalk grassland in summer should be full of flowers and butterflies and other insects. Common flowers should include Bird's Foot Trefoil and Salad Burnet. Richer swards may contain Kidney Vetch, Common Rock Rose, Greater Knapweed, Small Scabious, Carline Thistle, Mouse-ear Hawkweed, Thyme, Fairy Flax, Stemless Thistle, Bee and Pyramidal Orchids.

The grassland areas vary across the site in type and turf height. This is influenced by depth of soil, localised heavy rabbit pressure and grazing. This mosaic of different turn heights and composition has lead to a varied invertebrate fauna and a range of flowering plants. Much of the grassland is herb-rich and overall supports a good diversity of characteristic calcareous grassland species. The richest grassland is likely to occur on steeper slopes and earthwork banks.

Rabbit grazing may become a problem, particularly in drought years. Rabbit populations can be kept low by shooting or ferreting, although this option may be limited due to the presence of archaeological features.

Some bare ground will enhance the mosaic of grassland features, however should this become more serious, eroded tracks etc can be repaired with crushed chalk.

Figures 9 & 10. Stone Curlew chicks (above) and eggs, photographed on special scrapes created for this species and which were used successfully since 2013.

Uncultivated and cropped areas (as identified in the Natural England HLS agreement) are used for nesting by birds such as Stone Curlew and Lapwing. The plots should be prepared during February and March, before breeding begins and must be retained until at least 31st July. This area consists of 12 acres and it is suggested that this should be divided into four separate 4 x4x acre plots, as indicated on the habitat map (appendix 6.)

2.3 Scrub

The scrub communities play an important part in the management of the site in both a positive and negative way. The scrub can be separated into different categories:

1. Mature Scrub. This comprises of a variety of typical species and provides habitat and food sources for birds and invertebrates. It requires management to prevent the development of secondary woodland and to prevent damage to archaeology. It is important to create a healthy age class of scrub species and to avoid endangered species such as Juniper from being smothered by dense scrub.

2. Middle age scrub/rotational scrub. This is either scrub that has been periodically cut or has recently developed. This scrub can be of a height of 1 – 2 metres but it is important that newly developed scrub does not invade areas of chalk grassland. A certain amount will need to be cut and removed on a regular cycle.

3. Seedling scrub/light scrub. This will be kept under control by grazing or by chemical treatment. Some areas will also be cut for hay and this method will also help to control the development of seedling scrub.

Key issues in the management of scrub:

i. Existing scrub should not be allowed to develop into woodland.

ii. Scrub should be removed in order to reclaim chalk grassland (where practical and appropriate depending on different scrub types).

iii. A range of scrub heights and age classes and communities should be present at the site.

iv. No further areas of chalk grassland should be lost to scrub invasion.

v. Archaeological features should be cleared of scrub to prevent root and rabbit damage where it occurs.

vi. Grazing density and type should be sufficient to manage the site. Grazing should be monitored to ensure that there are sufficient numbers of animals to make the required impact. In years of fewer animals, other methods such as foraging/hay making may be required.

vii. Areas of Hazel within mature scrub should be managed for invertebrates such as the scarce leaf beetle (*Altica brevicollis*) and other associated species.

viii. A mosaic of 20% scrub and 80% grassland should be maintained throughout the site.

ix. Prevent the further loss of any Juniper by selective removal of scrub and invasive tree species. Possibly use seed cages to help cultivate seedlings.

x. Retain any Yew or Beech trees within scrub areas.

Figure 11. Long-eared Owl chicks photographed at Tidgrove Warren Farm after successful breeding in 2014.

Key birds recorded at Tidgrove Warren:

During the summer, up to two pairs of Stone Curlew breed on the site (on the specially prepared Stone Curlew plots). There are also up to 15 pairs of Lapwing and 2 pairs of Long-eared Owls. Long-eared Owls clearly have a concentration in the Overton to Kingsclere area and it is thought that there may be 5 – 6 breeding pairs in this general area. These are the only known Long-eared Owls currently in Hampshire, although they are known to be difficult to detect.

During the winter, Short-eared Owls are usually present and also one or two Hen Harriers. These are all scarce birds in Hampshire and the management of the grassland and mature scrub is particularly important for their survival.

2.4 Woodland

Areas of woodland are mainly along the boundaries of Tidgrove Warren, along the main track and surrounding the farm buildings.

Woodland areas should contain a variety of trees, shrubs and grassland. They support a great abundance of wildlife, including rare and declining species. Old trees (veteran trees) are valuable for their biological, historic, cultural and landscape importance.

Generally speaking, do not plough or cultivate, soil compaction or the use of fertilisers within 15 times the diameter of the trunk of an old or veteran tree. Do not fell old trees, remove lower limbs or undertake unskilled tree surgery. Do not allow trees to be damaged by livestock. Where possible, plant suitable native trees to replace old trees when they eventually die.

Decaying wood can be very important to fungi, invertebrates, birds and mammals. This can be valuable wherever it occurs, including the tree trunk, branches of living trees, standing dead trees or fallen limbs. It is best to leave trees unmanaged (providing it is safe). Leave dead branches on trees and leave standing trees that have died. Also leave fallen limbs uncut beneath the tree and avoid disturbing the roots, trunk and main limbs of fallen trees.

Sycamore Birch and Ash are of little value and should be cleared as much as possible. Yew and Beech should be encouraged and where older trees are degenerating, tree surgery may be necessary to ensure that they are safe. Coppicing and pollarding are important traditional woodland management operations and where possible, maintain open features such as glades. Hazel is of great value to biodiversity and ideally should be coppiced on a regular 5 -7 year cycle.

Trees and scrubs in a grassland mosaic can be a valuable buffer and link between habitats. This habitat mosaic is dynamic and management is required to maintain a diverse structure and prevent dense scrub or woodland developing. Cutting and clearing of trees should generally take place in winter, outside the bird nesting season and after the berries have been eaten. Encourage a variety of species, height and age structures of trees and shrubs.

2.5 Lakes and Ponds

There are two large lakes on the site. The first is near the main farm buildings and a second slightly smaller lake is situated to the north of the farm in field parcel 9842.

The main lake near to the farm is used for breeding by Common Toad, which is of great value. If smaller pools could be created elsewhere on the estate, these would be of great value to other amphibians such as Smooth Newt and Common Frog and invertebrates (particularly Odonata species).

3.0 Management Prescriptions

3.1 Calcareous grassland

The management of the grassland is dependent on the grazing regime of domestic stock, the control of rabbits, the clearance of scrub and to a lesser extent, the control of erosion and poaching.

Scrub control in areas within the rotational scrub areas (see map in Appendix X), will be carried out on a rotational schedule. The scrub should be cut or swiped and treatment of stumps and re-growth should take place. The grassland areas will retain areas of scattered scrub so as to provide shelter as well as habitat diversity. Any newly developing scrub can generally be spot sprayed. The most effective chemical is found to be Garlon 4 for most scrub species and Timbrel has also been used successfully.

Dense areas of scrub can be removed to reclaim chalk grassland. This can include scalloping of bays and clearings and the creation of glades. It is important to ensure that suitable areas of scrub are maintained for invertebrate interest, as well as for birds and small mammals.

If Ragwort is an issue, this can be controlled by weed wiping, spot treatment and pulling by hand and machine. This will ensure that Ragwort is prevented from spreading and harmful to grazing stock. Creeping Thistle may also be a problem and should not be any more than occasional on the site.

Over-grazing will create too much bare ground. This will encourage thistles, ragwort and other undesirable species to invade. However under-grazing will allow rank dead

herbage and plant litter to block light from smaller species and prevent them from flowering. Scrub can also invade and shade out grasses and flowers.

Figures 12 & 13. An area of rotational scrub at Tidgrove Warren (above). Clearings within the light scrub should include patches of flowers such as Kidney Vetch, Common Rock Rose, Greater Knapweed and Cowslip (below).

3.2 Scrub

Areas of scrub that are not cleared in order to reclaim grassland will require management to prevent natural succession to woodland and maintain a varied structure. This will be undertaken by rotational coppicing and the removal of tree species such as Birch, Oak and Sycamore in established scrub blocks. In such places trees can be ring-barked to kill the tree and to provide standing dead wood habitat, particularly for invertebrates. Larger trees should only be present at irregular spacings, with an overall canopy of between 3% and 10% of the area. Scrub should be rotationally cut at approximately 10% of the scrub per year (excluding any Juniper).

Young Buckthorn scrub should be encouraged as a laval foodplant for the Brimstone butterfly. Scrub should cover 20% to 50% of the area and the vegetation within 2m of the edge of the scrub should be taller than 30cm. Species such as Cowslip, Birds Foot Trefoil, Ladies bedstraw, Black Meddick, Meadow Buttercup and Kidney Vetch (foodplant of the Small Blue butterfly), should be at least occasional within this area.

3.3 Woodland

Trees should be inspected annually along paths and tracks to ensure that they are healthy and are not dangerous. Mature Sycamores can be removed to prevent further seedlings. Any Yews should be preserved and should any planting be necessary, such as to fill gaps in the hedge, native species such as Hazel, Field Maple and Hawthorn should be used.

Figure 14. An area of mixed woodland at Tidgrove Warren, along the main track.

Management	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Control of Ragwort	June - August	June - August	June - August	June - August	June - August	June - August	June - August	June - August	June - August
Surveying and Recording									
Butterflies	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept
Reptiles		April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept
Aerial photography	June		June		June		June		June
Grazing (Summer)	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept	April - Sept
Grazing (winter)	Oct - Dec	Oct - Dec	Oct - Dec	Oct - Dec	Oct - Dec	Oct - Dec	Oct - Dec	Oct - Dec	Oct - Dec
Spraying of scrub	June - Aug	June - Aug	June - Aug	June - Aug	June - Aug	June - Aug	June - Aug	June - Aug	June - Aug
Scrub clearance (HLS)	Oct - Feb	Oct - Feb	Oct - Feb	Oct - Feb	Oct - Feb	Oct - Feb	Oct - Feb	Oct - Feb	Oct - Feb
Hedgerow maintenance (inc gapping up and coppicing)	Dec - Jan	Dec - Jan	Dec - Jan	Dec - Jan	Dec - Jan	Dec - Jan	Dec - Jan	Dec - Jan	Dec - Jan

Table 1. Ten-year management plan. The scrub to grassland target ratio should be 20% scrub to 80% grassland, to be achieved by woodland and scrub management over the course of the HLS agreement.

4.0 References

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Appendix 1

Lepidoptera recorded

Code	Taxon	Vernacular	Site	Gridref	Vice County	Quantity	Date
1875	Asthena albulata	Small White Wave	Tidgrove Warren	SU527549	12	1	24 Apr 2011
1936	Menophra abruptaria	Waved Umber	Tidgrove Warren	SU527549	12	5	24 Apr 2011
0608	Elachista rufocinerea		Tidgrove Warren	SU527549	12	10	24 Apr 2011
2064	Phragmatobia fuliginosa	Ruby Tiger	Tidgrove Warren	SU527549	12	1	24 Apr 2011
1906	Opisthograptis luteolata	Brimstone Moth	Tidgrove Warren	SU527549	12	13	24 Apr 2011
2190	Orthosia gothica	Hebrew Character	Tidgrove Warren	SU527549	12	5	24 Apr 2011
1888	Ligdia adustata	Scorched Carpet	Tidgrove Warren	SU527549	12	3	24 Apr 2011
1724	Xanthorhoe spadicearia	Red Twin-spot Carpet	Tidgrove Warren	SU527549	12	2	24 Apr 2011
1852	Eupithecia abbreviata	Brindled Pug	Tidgrove Warren	SU527549	12	9	24 Apr 2011
1853	Eupithecia dodoneata	Oak-tree Pug	Tidgrove Warren	SU527549	12	4	24 Apr 2011
1651	Cilix glaucata	Chinese Character	Tidgrove Warren	SU527549	12	1	24 Apr 2011
1860	Pasiphila rectangulata	Green Pug	Tidgrove Warren	SU527549	12	3	24 Apr 2011
1860	Pasiphila rectangulata	Green Pug	Tidgrove Warren	SU527549	12	3	24 Apr 2011
1883	Acasis viretata	Yellow-barred Brindle	Tidgrove Warren	SU527549	12	2	24 Apr 2011
1738	Epirrhoe alternata	Common Carpet	Tidgrove Warren	SU527549	12	1	24 Apr 2011
2028	Calliteara pudibunda	Pale Tussock	Tidgrove Warren	SU527549	12	5	24 Apr 2011
2425	Colocasia coryli	Nut-tree Tussock	Tidgrove Warren	SU527549	12	9	24 Apr 2011
1997	Furcula furcula	Sallow Kitten	Tidgrove Warren	SU527549	12	1	24 Apr 2011
2011	Pterostoma palpina	Pale Prominent	Tidgrove Warren	SU527549	12	2	24 Apr 2011
2015	Drymonia ruficornis	Lunar Marbled Brown	Tidgrove Warren	SU527549	12	1	24 Apr 2011
0150	Adela reaumurella		Tidgrove Warren	SU527549	12	1	24 Apr 2011
0986	Syndemis musculana		Tidgrove Warren	SU527549	12	3	24 Apr 2011
0228	Monopis weaverella		Tidgrove Warren	SU527549	12	1	24 Apr 2011
1858	Chloroclystis v-ata	V-Pug	Tidgrove Warren	SU527549	12	1	24 Apr 2011
1955	Cabera pusaria	Common White Wave	Tidgrove Warren	SU527549	12	1	24 Apr 2011
1776	Colostygia pectinataria	Green Carpet	Tidgrove Warren	SU527549	12	1	24 Apr 2011
1660	Polyploca ridens	Frosted Green	Tidgrove Warren	SU527549	12	1	24 Apr 2011
2003	Notodonta ziczac	Pebble Prominent	Tidgrove Warren	SU527549	12	1	24 Apr 2011
2060	Spilosoma lubricipeda	White Ermine	Tidgrove Warren	SU527549	12	3	24 Apr 2011
1750	Lampropteryx suffumata	Water Carpet	Tidgrove Warren	SU527549	12	2	24 Apr 2011
1747	Anticlea derivata	Streamer	Tidgrove Warren	SU527549	12	1	24 Apr 2011
1727	Xanthorhoe montanata	Silver-ground Carpet	Tidgrove Warren	SU527549	12	1	24 Apr 2011
2092	Agrotis puta	Shuttle-shaped Dart	Tidgrove Warren	SU527549	12	1	24 Apr 2011

0966	Cochylis atricapitana	Tidgrove Warren	SU527549	12	1	24 Apr 2011
0305	Parornix scoticella	Tidgrove Warren	SU527549	12	1	24 Apr 2011
0329	Phyllonorycter spinicolella	Tidgrove Warren	SU527549	12	1	24 Apr 2011
0607	Elachista canapennella	Tidgrove Warren	SU527549	12	1	24 Apr 2011

Table 2. List of moths recorded at Tidgrove Warren Farm in 2011 by Graham Dennis by MV trap (part night).

Butterflies	**Moths - day flying observations**
Small Skipper	Mother Shipton
Large Skipper	Burnet Companion
Brimstone	Common Carpet
Large White	Silver-ground Carpet
Small White	Silver Y
Green-veined White	Cinnabar
Orange tip	Dusky Sallow
Brown Argus	Yellow Shell
Common Blue	Nemophora metallica
Red Admiral	Brown-line Bright-eye
Painted Lady	Shaded Broad-bar
Small Tortoiseshell	
Peacock	
Comma	
Speckled Wood	
Marbled White	
Gatekeeper	
Meadow Brown	
Ringlet	
Small Copper	
Holly Blue	
Essex Skipper	
Dark Green Fritillary	
Small Heath	
Clouded Yellow	
Silver Washed Fritillary	
Small Blue	
Green Hairstreak	

Table 3. Butterflies and moths recorded by Andy Bolton at Tidgrove Warren 2010 – 2014. Bold text indicates more local and therefore significant species

Appendix 2

Birds and Mammals recorded

Little Grebe	Lapwing	Meadow Pipit
Little Egret *	Woodcock	Grey Wagtail
Grey Heron	Black-headed Gull	Pied Wagtail
Canada Goose	Common Gull	Wren
Mallard	Lesser Black-backed Gull	Dunnock
Tufted Duck	Stock Dove	Robin
Red Kite	Woodpigeon	Whinchat
Hen Harrier	Collared Dove	Stonechat
Montagu's Harrier *	Cuckoo	Wheatear
Sparrowhawk	Barn Owl	Blackbird
Buzzard	Little Owl	Fieldfare
Kestrel	Tawny Owl	Song Thrush
Hobby	Long-eared Owl	Redwing
Peregrine	Short-eared Owl	Mistle Thrush
Red-legged Partridge	Nightjar *	Lesser Whitethroat
Grey Partridge	Swift	Whitethroat
Pheasant	Green Woodpecker	Garden Warbler
Moorhen	Great Spotted Woodpecker	Blackcap
Coot	Skylark	Chiffchaff
Stone Curlew	Swallow	Willow Warbler
Golden Plover	House Martin	Goldcrest

Spotted Flycatcher	Jay	Chaffinch
Long-tailed Tit	Magpie	Greenfinch
Marsh Tit	Jackdaw	Goldfinch
Coal Tit	Rook	Linnet
Blue Tit	Carrion Crow	Lesser Redpoll
Great Tit	Raven	Bullfinch
Nuthatch	Starling	Yellowhammer
Treecreeper	House Sparrow	Reed Bunting

Table 4. Birds recorded by Keith Betton, Barry Stalker and Raleigh Place (*) between 2009 and 2014.

Brown Hare	Numerous
Dormouse	Recorded in SU5054 & SU5053 in 2010

Table 5. Scarce mammals recorded at Tidgrove Warren (Natural England FEP).

Appendix 3

Flora recorded

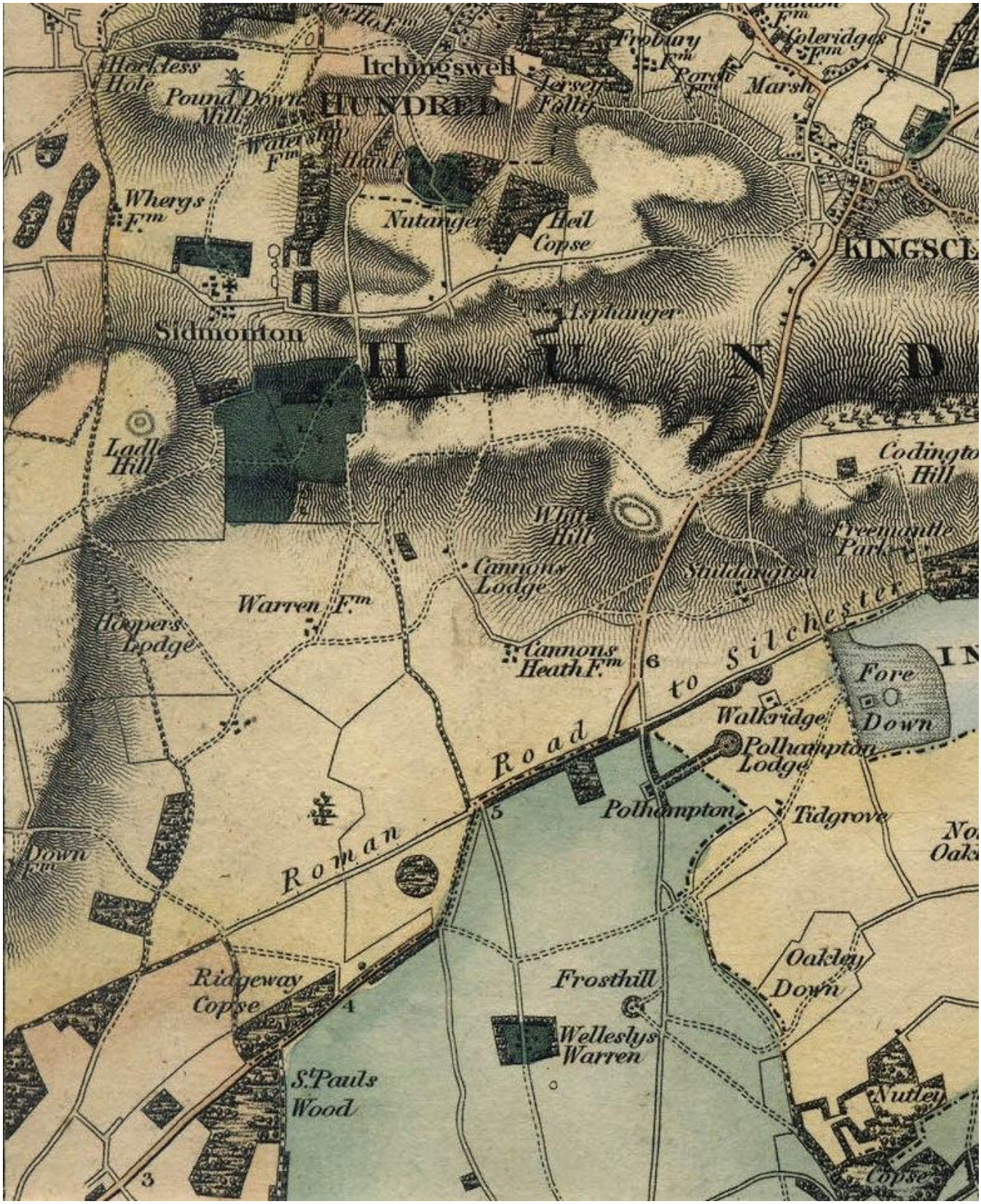
Code	Taxon	Vernacular
21	Aethusa cynapium	Fool's Parsley
22	Agrimonia eupatoria	Agrimony
39	Agrostis stolonifera	Creeping Bent / Fiorin
99	Anagallis arvensis	Scarlet Pimpernel
113	Anisantha sterilis	Barren Brome
131	Aphanes arvensis agg.	Parsley Piert
161	Arenaria serpyllifolia sens. lat.	
169	Arrhenatherum elatius	False Oat-Grass
250	Brachypodium sylvaticum	False-brome / Wood False-brome
325	Capsella bursa-pastoris	Shepherd's-purse
444	Centaurea nigra	Common Knapweed / Black Knapweed / Hardhead
446	Centaurea scabiosa	Greater Knapweed
5486	Centaurium erythraea	Common Centaury
467	Cerastium fontanum	Common Mouse-ear
515	Cirsium arvense	Creeping Thistle
522	Cirsium vulgare	Spear Thistle
528	Clematis vitalba	Traveller's Joy / Old Man's Beard
530	Clinopodium vulgare	Wild Basil
544	Convolvulus arvensis	Field Bindweed
548	Cornus sanguinea	Dogwood
557	Corylus avellana	Hazel
569	Crataegus monogyna	Hawthorn
607	Dactylis glomerata	Cock's-foot
5474	Daucus carota	Wild Carrot
762	Euonymus europaeus	Spindle / Spindle-tree
771	Euphorbia exigua	Dwarf Spurge
841	Fraxinus excelsior	Ash
873	Galium aparine	Cleavers / Goosegrass
879	Galium mollugo	Hedge Bedstraw
888	Galium verum	Lady's Bedstraw
907	Geranium dissectum	Cut-leaved Crane's-bill
968	Heracleum sphondylium	Hogweed / Cow Parsnip / Keck
983	Holcus lanatus	Yorkshire-fog
1010	Hypericum hirsutum	Hairy St. John's-wort
1014	Hypericum perforatum	Perforate St. John's-wort / Common St. John's Wort
1084	Knautia arvensis	Field Scabious
1104	Lapsana communis	Nipplewort
1124	Legousia hybrida	Venus's-looking-glass
502	Leucanthemum vulgare	Oxeye Daisy
1144	Ligustrum vulgare	Wild Privet
1164	Linaria vulgaris	Common Toadflax / Butter and Eggs
1183	Lolium perenne	Perennial Rye-grass / Common Rye-grass
1250	Medicago lupulina	Black Medick
1317	Myosotis arvensis	Field Forget-me-not / Common Forget-me-not
1361	Odontites vernus	Red Bartsia
1377	Ononis repens	Common Restharrow / Rest-harrow
1424	Papaver argemone	Prickly Poppy / Long-headed Bristly Poppy / Pale Poppy
1430	Papaver rhoeas	Common Poppy / Corn Poppy
2247	Phleum pratense sens. lat.	Timothy
1476	Pimpinella saxifraga	Burnet-saxifrage
1487	Plantago lanceolata	Ribwort Plantain

1488	Plantago major	Greater Plantain / Ratstail Plantain
1506	Poa pratensis sens. lat.	Smooth Meadow-grass
1522	Polygonum aviculare agg.	Knot-grass (agg.)
1610	Prunella vulgaris	Selfheal
1617	Prunus spinosa	Blackthorn
1675	Rhamnus cathartica	Buckthorn
1726	Rubus caesius	Dewberry
1846	Scabiosa columbaria	Small Scabious
1912	Sherardia arvensis	Field Madder
1258	Silene latifolia	White Campion
1952	Sonchus arvensis	Perennial Sow-thistle / Corn Sow-thistle
1957	Sorbus aria agg.	Whitebeam
2069	Torilis japonica	Upright Hedge-parsley / Hedge Parsley
2092	Trifolium repens	White Clover
1241.1	Tripleurospermum inodorum	Scentless Mayweed
2165	Veronica arvensis	Wall Speedwell
2168	Veronica chamaedrys	Germander Speedwell / Birdseye Speedwell
2175	Veronica persica	Common Field-speedwell / Buxbaum's Speedwell
2184	Viburnum lantana	Wayfaring-tree
2191	Vicia hirsuta	Hairy Tare
2206	Viola arvensis	Field Pansy

Table 6. Flora recoded at Tidgrove Warren Farm in July 2010.

Appendix 4

Archaeological Map



Area surrounding Tidgrove Warren Farm map from Greenwood 1826.

Appendix 5

Aerial photograph

England • Basingstoke and Deane

Appendix 6

Habitat Map

Tidgrove Habitat Map

Legend

- Calcereous grassland
- Light scrub / grassland
- Rotational scrub
- Mature scrub
- Archaeological site
- Lakes and ponds
- Proposed new pond
- Stone Curlew plots *(non permanent)*
- ------- Fence

Light Scrub
Lightly top/graze cut on 3-5 year cycle.

Rotational Scrub
Cut in 5-7 year cycle. Scrub should be 1-2m high (cut approx 10% of scrub in any one year.

Mature Scrub
Leave for longer periods cut/trim on 10-15 year cycle.

0 200 400
Metres