

Abbey Road Open Space

Steypning

Ecological Report and Management Plan



February 2021

Roger Brown

Contents

1. Introduction	p.1
2. Site Description	p.2
2.1 Location and boundaries	p.2
2.2 Ownership	p.2
2.3 Site management structure	p.2
2.4 Site infrastructure	p.3
2.4.1 Physical features	p.3
2.4.2 Biological habitats	p.4
2.5 Official Designations	p.5
3. Key Wildlife Species	p.5
4. Management Objectives	p.6
5. Management Recommendations	p.6
6. Species Lists	p.8
7. Maps and Photos.	pp.9-11

Map 1: Abbey Road Open Space. Location and Boundaries

Map 2: Plan of Abbey Rd North (The Site) showing main features.....

Map 3. Defra MAGIC map of Abbey Rd area showing habitat designations

Site Photos.

1. Introduction

The Abbey Road Open Space is hidden away amongst the housing developments to the west of the A283 Steyning by-pass, and is probably unknown by the majority of Steyning's residents. The site has been left unmanaged for the last 20+ years, apart from grass cutting and essential tree maintenance.

This has allowed the site to mature and develop to a point where it now needs some gentle attention to maintain what is there, whilst improving other areas that have become overgrown or swamped by more rampant growth.

Most people who see this site for this first time are surprised by how many different habitats are represented here, including chalk stream, wet woodland, ditch, pond, meadow, hedgerow and scrub.

None are very extensive, but together they make up a valuable mix, that with some gentle management, could become an even more important biodiverse site in this part of Steyning.

Hopefully this Report will be helpful in guiding the future management of this special place.

2. General Description.

2.1 Location and boundaries

The Abbey Road Open Space comprises 4.5 acres (1.8 hectares) divided by the residential road Abbey Road, into two areas, referred to for the purposes of this report, as Abbey Rd North, and Abbey Rd South.

Abbey Rd North is the larger of the two at about 2.75 acres and with the A283 Steyning by-pass forming its eastern limit.

Abbey Rd South comprises about 1.75 acres with the grounds of Gatewick House forming the western boundary. Abbey Road South is primarily a recreational space with mown grass and mature trees on its western boundary. A small Orchard is planned here in the south western corner.

2.2 Ownership

The whole Abbey Road Open Space is owned by Steyning Parish Council. It was land given by the developers of the new houses around Abbey Rd in the mid 1990's, presumably because it forms part of the flood plain for the Tanyard Stream and is too wet for building houses on.

It was designated as a Village Green (VG95) in June 2016. This gives local people the legal right to use the land for informal recreation and protects it from future development.

2.3 Site management structure

The Communities Committee of the Parish Council is responsible for the day-to-day management of the Open Spaces in Steyning, including the Abbey Road Open Space.

An 'Abbey Road Conservation Volunteers' group (ARCVs) has been set up to carry out work on the site according to this Management Plan.

The members of the ARCVs include: a Parish Councillor, residents living close to Abbey Rd and other local residents. These include people with experience of working on environmental projects such as this.

The leader of the ARCVs will liaise with the nominated Parish Council member to update and inform the Communities Committee of progress, and request resources where these are needed to carry out this plan. Other sources of funding will also be explored where appropriate.

2.4 Site Description

2.4.1 Physical features

The site is low lying and slopes gently from south west to north east towards the A283 Steyning by-pass. The highest part of the site is just 6 metres above mean sea level, dropping to 4 metres at the lowest part of the site close to the by-pass.

The site is believed to be close to the location of the 11th Century Port of St Cuthman. when it was an inlet from the River Adur tidal estuary. Saxon remains were found during the 1989 archaeological investigation of the old Market Field just to the south of the site.

A chalk stream known as the 'Tanyard Stream' flows on the western side of the site. This stream emerges as springs on the Downs by the Rifle Range a mile to the west and flows through the Court Mill pond, behind St Georges Place cottages. It is then ducted in a culvert under the lower High Street until it emerges as an open stream in the garden of the Star pub, where Brown Trout can often be seen. From here it runs via Tanyard Lane (in a culvert under the front gardens here) into the grounds of Gatewick House and into the Abbey Road Open Space. It runs under Abbey Road itself in a large culvert, and then leaves Abbey Road entering another large culvert taking it under the by-pass and out towards the River Adur.

The EA are responsible for the stream as it forms part of the flood defence for Steyning and is classed as a 'Main River' upstream as far as the Star Pub on the High Street. They maintain the pipes and culverts from here downstream, and in most years either hand cut or machine cut the vegetation in the stream itself and on the stream banks.

The recent Steyning Community Plan had this to say about Abbey Road:

Steyning Community Plan: Character Appraisal. 2019. *There is no prospect of the open spaces off Abbey Road being developed as they now have village green status, so the spacious feel of this 1980s/1990s development should continue. Consideration should be given to improving the recreational facilities on the western side of the village green and to maintaining the east side as a natural wildlife area.* <https://www.steyningcommunityplan.co.uk/>

Geological Profile (from British Geological Survey)

The site is part of the ancient Adur river estuary, and because of this, has overlying superficial deposits of clay, silt and sand. The BGS Geological Map shows these overlying a bedrock of Gault clay/mudstone.

In 1969, 2 Boreholes were sunk into the area prior to the building of the by-pass. The first was sunk 6 metres deep by the Tanyard stream. It recorded different types of clay down to 6 metres. The second was at the foot of the new road embankment on the Abbey Rd side. This was also sunk to 6 metres. It registered clay down to 3 metres, then a 1.5m layer of chalky clay with flints, then more clay down to 6 metres. From these surveys we can be sure that the Site is clay down to several metres. This has been confirmed by the limited digging we have done in deepening a small part of the pond area. This bodes well for deepening the pond further and being able to retain water in it for longer.

2.4.2 Biological habitats

From observations over the last year, the following habitats are present on the site:

Stream. As already described, the Tanyard chalk stream runs along the western border of the site.

Stream Flood area. This is an 8 metre wide strip to the east of the stream, bounded by a 1m high bank. This was probably created during the house building period, to provide some water storage during flood periods. It is a damp grassy area with thick brambles, nettles and reeds.

Pond. This is currently a shallow winter pond, with the water draining away quickly in early Spring. At its largest extent it covers 34m x 64m. (just over 2,000 sq m: equivalent to 4 tennis courts)

Ditch. A drainage ditch runs the length of the site at the foot of the by-pass embankment. The eastern end is hidden beneath dense scrub, but the western end drains into the Tanyard stream just as it enters the culvert under the by-pass.

Woodland. There is a mixture of mature and semi-mature deciduous trees mostly on the north and eastern parts of the Site. These are mostly typical wet woodland species such as Willow, Alder and Birch with some Oak and Ash in the slightly drier parts. On the Abbey Rd South part of the site on the boundary with Gatewick House are mature Field Maple, Lime, Aspen and Cherry trees

Open Meadow. Closest to Abbey Road itself is an open grassy area of approx. 2,000 sq m. Recently a mixed deciduous hedge has been planted on the edge of this area adjacent to the footpath. This is now cut twice a year with risings removed.

Grassy glade. This is a small (c 500 sq m) grassy area surrounded by deciduous trees on all sides, to the north east of the pond area.

Scrub To the east of the site is a heavily overgrown area of scrub including bramble, hawthorn and blackthorn. Further smaller scrub areas are scattered across the Site

Recreational Area. Much of Abbey Rd South is a recreational space with mown grass

2.5 Official Designations

The UK Govt MAGIC database pulls together information about the environment from many government departments including the Environment Agency, DEFRA and Natural England.

Across the A283 to the north-east of the site are 2 areas of **Priority Habitat** under the UK Biodiversity Action Plan:

1).Deciduous Woodland and 2).Coastal and Floodplain Grazing Marsh. This is the floodplain of the Adur River. (See Map 3. The green and blue areas)

Data from Natural England on this MAGIC database shows the fringe of the Abbey Road Open Space closest to the by-pass marked as a “Network Enhancement Zone 2” and the rest of the Abbey Road site (north and south) is marked as a “**Network Expansion Zone**”: (see Map 3, the area ringed in red).

A **Network Expansion Zone** is land within relatively close proximity to the Network Enhancement Zone that has potential for expanding, linking/joining networks across the landscape. Action can be targeted in this zone to improve these connections.

These designations indicate how important this site is in terms of wildlife corridors and linking habitats together across the area.

3. Key Wildlife Species

3.1 Priority (Biodiversity Action Plan) and Rare Species

An Ecological Data Search was requested from the Sussex Biodiversity Records Centre for the Abbey Road and close surrounding area.

Among the records found, were these Priority and Rare Species (Priority species are those identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP))

- Cuckoo
- Hedgehog
- BrownTrout

The following additional ‘Priority and Rare Species’ have also been found on the site during 2020.

- Toad
- Noctule Bat
- Soprano Pipistrelle Bat

4. Management Objectives

4.1) To maintain the current balance between woodland and specimen trees, pond, stream, scrub and grassy meadow areas.

4.2) By sensitive and gentle management to preserve and enhance the biodiversity of both fauna and flora on the Site.

4.3) By regular surveying, to monitor and record the fauna and fauna on the Site.

4.4) To liaise and continue to work with different agencies such as the South Downs National Park Authority, The Sussex Wildlife Trust, the Ouse and Adur Rivers Trust and the Environment Agency, to ensure that expert advice is sought to guide the future management of the site.

4.5) To maintain public access to the site by creating and maintaining walkways around the site. These may be mown paths through the grass, or constructed all-weather paths through the wetter areas.

4.6) To maintain local community interest and engagement by regular updates and reports through the Parish Council Newsletter or community publications such as Your Steyning.

4.7) To support the Abbey Road Conservation Volunteers in order to manage the site according to this Plan.

5. Management Recommendations

Objective	Actions
1 Maintain the current balance between habitats	-Ensure that each of the existing habitats are kept in balance by having an action plan for each one. -Intention is to make small changes, then monitor the effects of those changes before making further changes. This is a new mostly unrecorded Site. We don't want to damage any habitat and possibly lose what species might be there, in an effort to improve another habitat. Softly, softly should be the approach.
2 Preserve and enhance biodiversity	-Use 2021 to establish what is present now in each of those habitats. -Then draw up plans for each of the 8 habitats present.- -Aim is to improve the biodiversity of this Site, but also contribute to the biodiversity targets of Greening Steyning's 2030 project -Assist Steyning Community Orchard in planting a small Orchard in the south west corner of Abbey Rd South -Investigate possibility of planting some Black Poplar trees on site.
3 Monitor and record the fauna and fauna	-Establish regular botanical surveys with our volunteer plant recorders.(Bob and Fran) -Carry out monthly bird survey with our volunteer bird recorder.(Colin) -Carry out monthly bat surveys. May to-September -Carry out monthly butterfly surveys. March to October

	-With OART, carry out biological stream surveys -Investigate what other wildlife may be present by trap cameras, field surveys for invertebrates. -Look at holding an annual? 'fun' BioBlitz to engage local residents especially children.
4 Liaise with experts and agencies	-Maintain regular contact with the Environment Agency regarding the Tanyard stream. They require a Flood Risk Activities Permit for any work done within 8 metres of the stream. -Work with OART as already described. -Use other experts such as those at the SWT, SDNPA and our local Steyning Downland Scheme to guide and assist in guiding this Management Plan and any future changes that may be made to it. -Liaise with Steyning For Trees over any additional tree planting that might be proposed.
5.Maintain public access to the Site	-Maintain pathways by liaison with Parish Council clerk/contractors cutting the grass paths. -Clear overgrowing vegetation from the pathways twice a year as necessary. -Investigate improving the pathways that become waterlogged in winter. -Do the above to guide visitors away from more sensitive wildlife areas.
6 Community interest and engagement	-Produce regular updates and reports for the Parish Council and local residents. -Write occasional items for the Your Steyning magazine -Invite local residents to take part in events such as bat surveys, BioBlitzes, 'Open Days'? -Install an Interpretive Board to explain the Site to visitors.
7 Abbey Road Conservation Volunteers	-Aim to meet monthly to carry out Conservation work on site -Produce regular updates to the Volunteers to keep them engaged and informed of work being done on the Site, and what is planned in the future. -Use this group as a 'sounding board' for ideas/suggestions that can then be shared with other stakeholders.

6. Species Lists

The following is a list of species that were seen on site March to November 2020.
This list will be added to as more surveys are carried out.

Flora:

Cock's foot (grass), Meadow Foxtail (grass), Yorkshire Fog (grass)
Norfolk Reed, Bristly OxTongue, Marsh Thistle, Meadowsweet, Marsh Ragwort, Hard Rush,
Soft Rush, Purple Loosestrife, Bistort, Pendulous Sedge, Greater Pond Sedge, Water Mint,
Silverweed, St John's Wort, Bramble, Teasel, Dock, Nettle, Mallow, Hemp Agrimony, Cow
Parsley, Cleavers, Creeping Cinquefoil, Dandelion, Yellow Iris,

Trees:and Shrubs Narrow-leaved Ash, Italian Alder, English Oak, Silver Birch, Goat
Willow, White Willow, Golden Weeping Willow, other Willow spp, Blackthorn, Common
Hawthorn, European Ash, Field Maple, Norway Maple, Aspen, Lime, Cherry,

Fauna

Butterflies: Small Copper, Common Blue, Meadow Brown

Bats: Common Pipistrelle, Soprano Pipistrelle, Nathusius' Pipistrelle, Noctule

Birds: Heron, Buzzard

Frogspawn and tadpoles, Toad, Midge larvae. (red bloodworms), Flatworms, Leeches.
Daphnia (water flea), Copepods (eg Cyclops), and other Protozoa.
Four Spot Orb-Weaver spider,

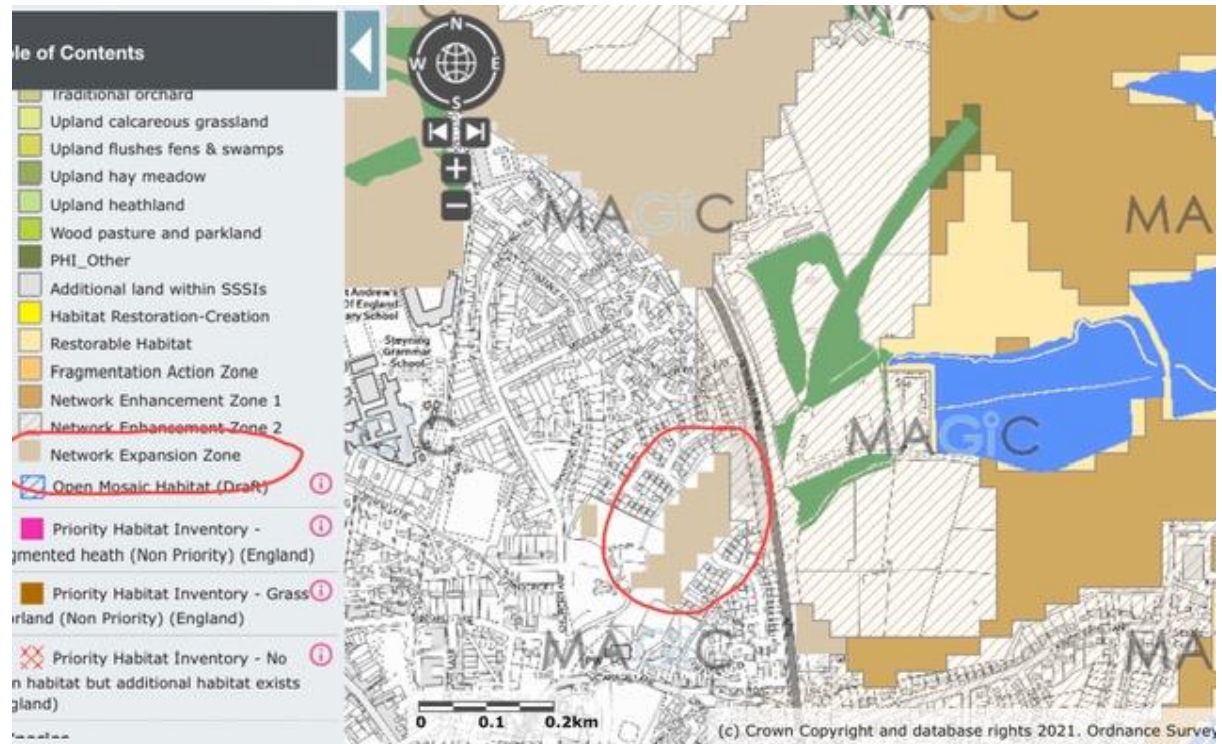
Map 1. Abbey Road Open Space. Location and Boundaries



Map 2. Plan of Abbey Rd North (The Site) showing the main features



Map 3 Defra MAGIC map of Abbey Rd showing habitat designations



Pictures taken around the Abbey Road Open Space in 2020,

Tanyard Stream



Grassy Meadow area



Mature Willow trees



Willow tree growth in pond basin



'Pond' in Summer 2020.



Pond in December 2020

