

AN ECOLOGICAL SURVEY
of
LAND ADJACENT TO DEER LEAP HOUSE,
CROSSWAYS
[CRS07]

for
Dorset Council
November 2021

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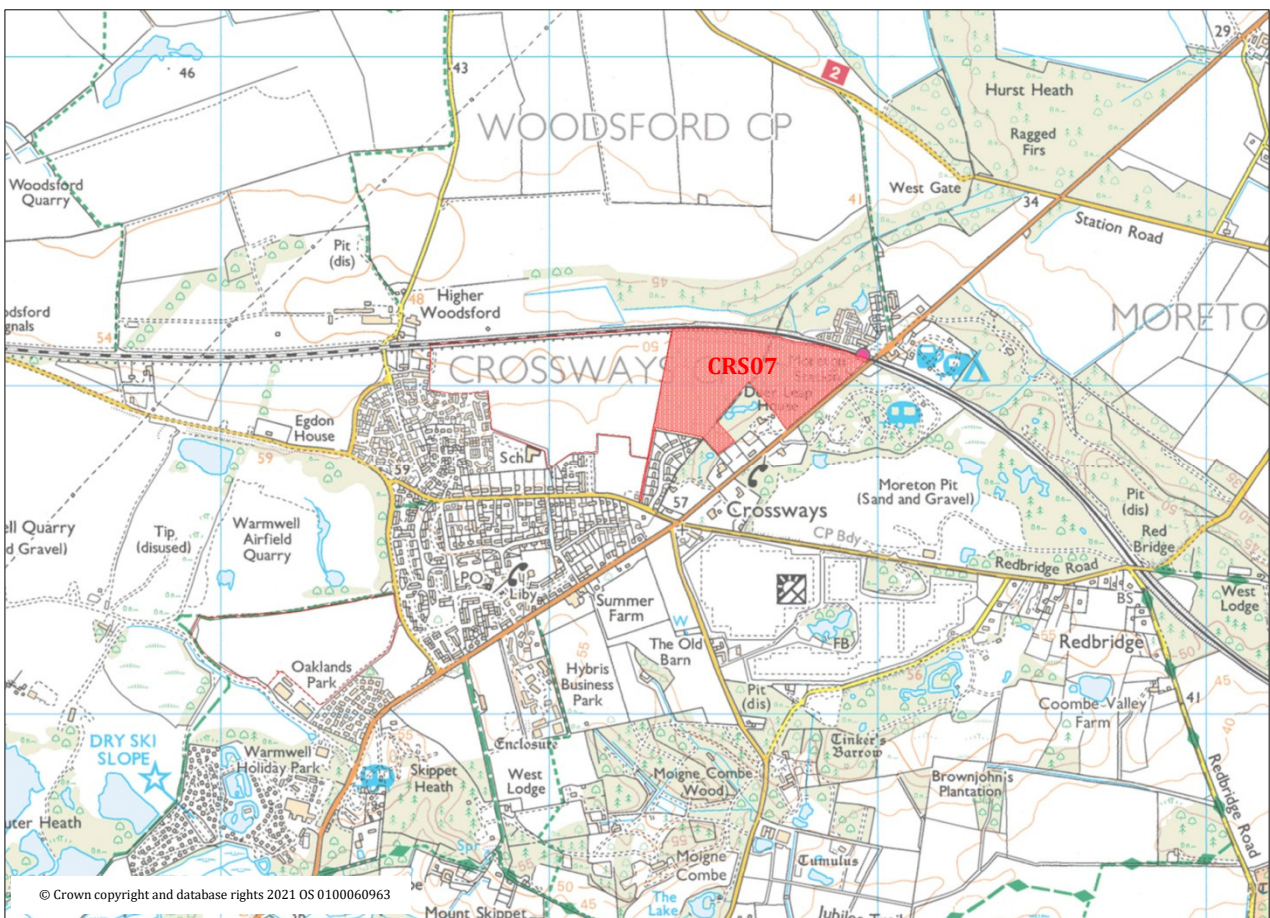
SUMMARY

- This report forms part of a suite of ecological surveys commissioned by Dorset Council's Strategic Planning and Natural Environment Teams. Together the survey reports form part of the evidence base for the Local Plan, containing extended Phase 1 survey information for the potential allocated sites, highlighting important habitats and the likelihood of protected species being present.
- The site is mostly currently of **Low to Moderate Ecological Importance**, the woodland is of recent origin and has little structure but is likely to support a range of common breeding bird species. There is also suitable foraging habitat for bats and some of the larger trees could potentially support roost sites.
- In the north of the site the stand of **W4** Downy Birch – Purple Moor-grass wet woodland, including the 'Lily Pond', is of **High Ecological Importance** as it qualifies as **Wet Woodland Priority Habitat** and **Section 41 Habitat of Principal Importance**.

1.0 INTRODUCTION

This report forms part of a suite of ecological surveys commissioned by Dorset Council's Strategic Planning and Natural Environment Teams. Together the survey reports form part of the evidence base for the Local Plan, containing extended Phase 1 survey information for the potential allocated sites, highlighting important habitats and the likelihood of protected species being present. The surveys have been carried out by Dorset Environmental Records Centre who are working with Dorset Council to ensure that ecological data for the Local Plan process is as up-to-date as possible.

MAP 1 Location of site



2.0 METHODS

The survey was undertaken on the 8th November 2021 in overcast weather. The area was walked and a plant species list compiled with frequencies assigned to each species using the DAFOR scale¹. Particular attention was paid to the presence of any Section 41 or Red Listed species, and any that are on the Dorset Environmental Records Centre (DERC) lists of Dorset Notable species (DERC, 2012). Habitats present were assessed for their potential to support protected species (see Section 6.1), and visible signs for Badger such as setts, latrines and paths were looked for. Each habitat type present and any species or features of particular note were described using target notes (see Section 5.2.2).

A habitat map was produced in the field by drawing boundaries of the different vegetation types over a print out of the latest aerial photograph. This was then digitized using DERCs Integrated Habitat System (IHS) mapping process.

The sites are assessed for their ecological interest at the time of the survey (see Section 6.0). Those sites assessed as being of **Low Ecological Interest** have very little interest and are generally improved grasslands or arable fields. Those of **Moderate Ecological Interest** may support some interest such as one or more Dorset Notable plant species, but do not qualify as a Site of Nature Conservation Interest (SNCI). Those of **High Ecological Interest** are of SNCI quality and are therefore an important wildlife site within a county context.

Nomenclature for plants follows Stace (2019).

¹ The DAFOR scale records species according their abundance as follows:

D = Dominant; **A** = Abundant; **F** = Frequent; **O** = Occasional; **R** = Rare; **L** = Local (e.g. **LF** = Locally Frequent)

3.0 LEGISLATION & POLICY

3.1 LEGISLATION

The following legislation may be of relevance to the proposed works. Full details of statutory obligations with respect to biodiversity and the planning system can be found in DCLG Circular 06/2005.

- **The Conservation of Habitats and Species (Amendments) (EU Exit) Regulations 2019:**

This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into domestic law and ensures that the habitat and species protection and standards will continue to apply upon the UK's exit from the EU. The Regulations provide protection for a number of species including:

- All species of bat
- Dormouse (*Muscardinus avellanarius*)
- Great crested newt (*Triturus cristatus*).

This legislation makes it an offence to deliberately capture, kill or injure individuals of these species listed on Schedule 2 and damage or destroy their breeding site or place of shelter. It is also illegal to deliberately disturb these species in such a way as to be likely to significantly affect: (i) the ability of any significant group of the species to survive, breed or rear or nurture their young; or (ii) the local distribution or abundance of the species.

This legal protection means that where development has the potential to impact on bats, or other species of national interest, the results of a protected species survey must be submitted with a planning application.

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are also protected under this legislation. These are a network of sites designated for supporting habitats or species of high nature conservation importance in the European context. Any activity that has a detrimental effect on these European sites³ is made an offence under the Regulations. Where a development is likely to have a significant impact on a European site, the Regulations require a rigorous assessment of the impacts, known as an Appropriate Assessment.

- **The Wildlife and Countryside Act 1981 (and amendments):**

Protected fauna and flora are listed under Schedules 1, 5 & 8 of the Act. Species likely to be of relevance include:

- All species of **bat**. It is an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost
- All species of **British reptile** (in particular grass snake (*Natrix helvetica*), common lizard (*Zootoca vivipara*), adder (*Vipera berus*) and slow-worm (*Anguis fragilis*)). It is illegal to kill or injure these species
- **Great crested newt**. It is illegal to obstruct access to any structure or place which great crested newts use for shelter or protection or to disturb any great crested newt while it is using such a place.

This Act also makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built). In addition, it is an offence to disturb any nesting bird listed on Schedule 1 or their young.

Schedule 9 of the Act lists those species for which it is an offence to plant or cause their spread. Species listed under Schedule 9 that are most likely to be encountered are Japanese knotweed (*Fallopia japonica*) and giant hogweed (*Heracleum mantegazzianum*).

Sites of Special Scientific Interest (SSSIs) are also protected under the Wildlife and Countryside Act 1981. These are a network of sites identified as being of national nature conservation importance and hence afforded legal protection.

National Nature Reserves (NNRs) are also protected under the Act (section 35 (1)) and established under the National Parks and Access to the Countryside Act 1949. These are nature reserves which are considered to be of national importance by the relevant statutory bodies i.e. Natural England, Natural resource Wales.

- **Natural Environment and Rural Communities Act (NERC) 2006:**

This Act enforces a duty on the planning authority and local council to conserve biodiversity (section 40). Additionally, section 41 encourages the local councils to be aware of the species and habitats of 'principal importance' and to act accordingly to protect and manage these habitats and species.

- **The Countryside and Rights of Way Act 2000:**

This Act strengthens nature conservation and wildlife protection through a number of mechanisms. It places a duty on Government Ministers and Departments to conserve biological diversity, provides police with stronger powers relating to wildlife crimes, and improves protection and management of SSSIs.

- **The Protection of Badgers Act 1992:**

This Act makes it an offence to wilfully take, injure or kill a badger (*Meles meles*); cruelly mistreat a badger; interfere with badger setts, sell or possess a live badger; mark or ring a badger. A licence is required for work affecting badgers and their setts.

- **Wild Mammals (Protection) Act 1996:**

This Act provides protection for all wild animals from intentional acts of cruelty.

- **Hedgerow Regulations 1997:**

These Regulations establish a set of criteria for assessing the importance of hedgerows. Where a hedgerow is deemed to be 'important' its removal is prohibited without consent from the local Planning Authority.

3.2 POLICY

The following policy is of relevance to this report:

- **National Planning Policy Framework (NPPF):**

This sets out the Government's vision for biodiversity in England with the broad aim that planning, construction, development and regeneration should maintain and enhance, restore or add to biodiversity and geological conservation interests. NPPF (2018) includes sections on legally protected species and sites (see Section 2.1).

- **Local Sites (including Sites of Nature Conservation Interest (SNCI), Local Nature Reserves (LNR), and Biological Notification Sites (BNSs)/County Wildlife Sites (CWSs)):**

These are a network of sites designated for their nature conservation importance in a local context. Although they are not afforded legal protection they contribute towards local and national biodiversity.

- **Natural England Protected Species Standing Advice:**

The standing advice is used by local authorities as a fall-back position when in pre-application consultation or during the determination period to define habitat and species survey efforts and mitigation proposals.

4.0 EXISTING DATA

The following summary is based on the desk study carried out by DERC for Dorset Council covering the Local Plan Emerging Site Allocations (DERC 2020). The species records are based on post-2010 data.

4.1 PROTECTED SPECIES

Species	Status	Distance from site
Badger	WCA	-
Bats	EPS; WCA	Within 1-km radius
Dormouse	S41; EPS; WCA	-
Otter	EPS; WCA	-
Water Vole	S41; WCA	-
Brown Hare	S41	-
Hedgehog	S41	-
Great Crested Newt	EPS; S41	-
Reptiles	S41; WCA	-

4.2 PROTECTED HABITATS

None adjacent to the site.

Lowland Heathland – Section 41; UK Priority Habitat 336 metres to the northwest

Lowland Mixed Deciduous Woodland – Section 41; UK Priority Habitat 1,400 metres to the southwest

Wet Woodland – Section 41; UK Priority Habitat 1,492 metres to the south

4.3 PROTECTED SITES

None adjacent to the site.

Warmwell Heath Site of Special Scientific Interest 1,532 metres to the southwest

Winfrith Heaths Site of Special Scientific Interest 1,854 metres to the southeast

5.0 RESULTS

5.1 SITE DESCRIPTION

The area occupies 13.8 hectares and lies between Dick O' Th' Banks Road and Moreton Station with the B3390 to the east. The southern part is marked as Dick o' th' Banks Plantation on some maps. The area overlies the acidic sands and gravels of the Poole Formation with some superficial deposits of River Terrace Gravels. Parts of the centre and east of the site have been exploited in the past for both sand and gravel resulting in a very uneven land surface.

5.2 HABITAT DESCRIPTION

Pine & mixed woodland

The majority of the site comprises woodland dominated by pine or a mixture of pine and broadleaved trees. The Scot's Pine *Pinus sylvestris* are mature and date from the 1970s. In places they dominate but in the east there are also Sycamore *Acer pseudoplatanus* and Pedunculate Oak *Quercus robur*, with smaller quantities of Beech *Fagus sylvestris* and Sweet Chestnut *Castanea sativa*. On damper ground Downy Birch *Betula pubescens* becomes frequent. The understorey varies in density with naturalised Rhododendron *Rhododendron ponticum* abundant in places with Cherry Laurel *Prunus laurocerasus* in one area. Elsewhere Holly *Ilex aquifolium* is frequent with occasional Hawthorn *Crataegus monogyna* and Rowan *Sorbus aucuparia*, plus rare Hazel *Corylus avellana* and Blackthorn *Prunus spinosa*. The field layer and ground flora is very patchy with little present under the densest canopy or where Rhododendron is abundant. There is patchy Bracken *Pteridium aquilinum*, Honeysuckle *Lonicera periclymenum* and Bramble *Rubus fruticosus*, with sparse Common Bent *Agrostis capillaris*, Sweet Vernal Grass *Anthoxanthum odoratum* and Yorkshire Fog *Holcus lanatus*. Herbs are few with just scattered plants of Tormentil *Potentilla erecta*, Germander Speedwell *Veronica chamaedrys*, Ground Ivy *Glechoma hederacea* and Wood Sage *Teucrium scorodonia*. On richer soil by the road in the east small quantities of Stinging Nettle *Urtica dioica*, Garlic Mustard *Alliaria petiolata* and False Brome *Brachypodium sylvaticum*.

Birch woodland

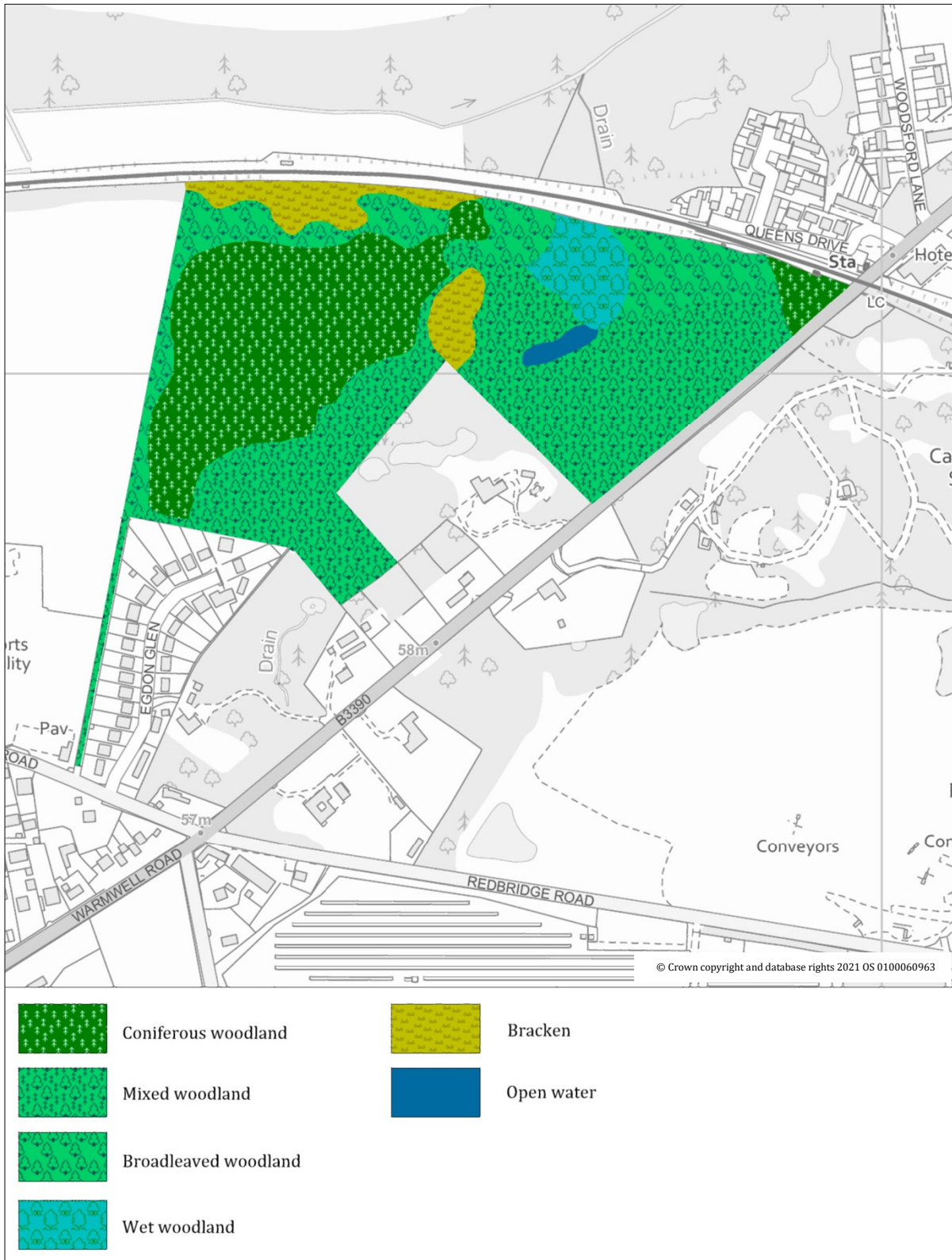
In the north of the site there are areas of broadleaved woodland dominated by Birch. On drier ground Silver Birch *Betula pendula* dominates with a very sparse understorey of Blackthorn, Holly and Hawthorn. The ground flora has patchy Bracken and Bramble with frequent Honeysuckle but other species are rare with just scattered plants of Tormentil, Wood Sage, Heath Speedwell *Veronica officinalis* and Bristle Bent *Agrostis curtisii*.

Of particular interest is the stand of wet woodland which has developed between the 'Lily Pond' and the railway line. Downy Birch dominated with Grey Willow *Salix cinerea* is scattered throughout and abundant in places. The ground flora is dominated by small tussocks of Purple Moor-grass *Molinia caerulea*, with Velvet Bent *Agrostis canina* abundant on wetter ground between the tussocks. On drier ground around the tree bases Hard Fern *Blechnum spicant* is occasional and Broad Buckler-fern *Dryopteris dilatata* rare. Bog-mosses are frequent in wetter areas between the *Molinia* tussocks, particularly *Sphagnum auriculatum*, with smaller quantities of *S. subnitens* and *S. palustre*; the moss *Polytrichum commune* and the liverwort *Pellia epiphylla* are also locally frequent in this area. This stand of wet woodland is referable to **W4** *Betula pubescens* – *Molinia caerulea* woodland within the National Vegetation Classification (NVC) and qualifies as **Priority Habitat** and **S41 habitat of Principal Conservation Importance**.

Other habitats

There are several open areas within the site that are completely dominated by dense Bracken with very little other vegetation present except along the deer paths where there is a patchy sward of Yorkshire Fog and Common Bent, plus a few scattered plants of Foxglove *Digitalis purpurea*, Wood Sage and Ground Ivy. An active Badger *Meles meles* sett was noted in the Bracken clearing west of the 'Lily Pond'.

5.2.1 Habitat map



5.2.2 Target notes



No.	Grid Ref	Target Note
01	SY7743 8899	Typical area of Scot's Pine dominated woodland with a few scattered Pedunculate Oak, Beech, Birch and Sweet Chestnut. There is a sparse understorey of Holly which has a distinct browse line due to the deer pressure. Hawthorn, Hazel and Rowan are also present. The ground layer is poorly vegetated with bare ground and needle litter dominating. Bracken and Bramble are patchy with Honeysuckle, Tormentil, Pill Sedge, Yorkshire Fog, Sweet Vernal Grass and Common Bent. Robust pleurocarpous mosses such as <i>Pseudoscleropodium purum</i> , <i>Hypnum jutlandicum</i> and <i>Thuidium tamariscinum</i> are locally prominent.
02	SY7740 8888	Pine-dominated woodland where Rhododendron forms dense understorey in places, there is very little ground flora.

No.	Grid Ref	Target Note
03	SY7751 8893	On damper ground Downy Birch becomes more abundant with Grey Willow and Pedunculate Oak with Rhododendron locally abundant in the understorey. Bracken is patchy and the ground flora is sparse with Common Bent and mosses locally prominent.
04	SY7749 8915	More open area near railway line with dry Birch woodland, open areas dominated by dense Bracken. The sparse ground flora under the Birch includes Wood Sage, Pill Sedge, Bristle Bent, Common Bent and Purple Moor-grass. In the open areas under the dense Bracken there are few species apart from Yorkshire Fog.
05	SY7760 8903	Bracken dominated clearing with an active Badger sett noted in the southeast corner.
06	SY7769 8902	The 'Lily Pond' shaded by trees and obviously used by Sika Deer with Purple Moor-grass at the margins grazed.
07	SY7773 8911	Stand of wet woodland dominated by Downy Birch with frequent Grey Willow over a ground layer of Purple Moor-grass tussocks that are grazed by deer with abundant Velvet Bent on wetter ground between the tussocks along with mosses, particularly <i>Sphagnum auriculatum</i> , with smaller quantities of <i>S. subnitens</i> and <i>S. palustre</i> ; the moss <i>Polytrichum commune</i> and the liverwort <i>Pellia epiphylla</i> are also locally frequent. Hard Fern and Broad Buckler-fern are found on drier ground around the tree bases.
08	SY7782 8902	More mixed woodland on old gravel workings with some large mature trees especially Sycamore and Pedunculate Oak, plus younger Birch and Beech. There is very little in the way of ground flora except near the pavement on the eastern boundary with Ivy, Bramble, Garlic Mustard and False Brome.
09	SY7771 8896	Scot's Pine more abundant here with Rhododendron forming a dense understorey and Cherry Laurel also present.

6.0 ASSESSMENT

The site is mostly currently of **Low to Moderate Ecological Importance**, the woodland is of recent origin and has little structure with the invasive non-native *Rhododendron* abundant in places, but it is likely to support a range of common breeding bird species and provide foraging habitat for bats. In the north of the site the stand of **W4** Downy Birch – Purple Moor-grass wet woodland, and including the ‘Lily Pond’, is of **High Ecological Importance** as it qualifies as **Wet Woodland Priority Habitat** and **Section 41 Habitat of Principal Importance**.

6.1 PROTECTED SPECIES ASSESSMENT

Species	Status	Habitat Potential	Future surveys
Badger	WCA	An active badger sett noted at the edge of a Bracken clearing	
Bats	EPS; WCA	The woodland edges and pond area provide suitable foraging habitat for bats. The older trees in the east have splits, holes and ivy which could be utilised as summer roosts.	Survey required
Dormouse	S41; EPS; WCA	The current habitat is sub-optimal for this species.	
Otter	EPS; WCA	Unlikely to be present.	
Water Vole	S41; WCA	Unlikely to be present.	
Brown Hare	S41	No suitable habitat present, but hares are known to use woodland in the winter.	
Hedgehog	S41		
Great Crested Newt	EPS; S41	A pond is present, but the water is probably too acidic for this species.	
Reptiles	S41; WCA	Most of the habitat is not suitable for reptiles, but the open Bracken areas, particularly along the railway line may support species such as Slow Worm and Common Lizard.	
Breeding birds	WCA	The woodlands are likely to support a range of woodland birds.	

REFERENCES

DERC 2012 *Dorset Notable Species Lists*. Dorset Environmental Records Centre, Dorchester

DERC 2020 *Local Plan Emerging Site Allocations: Ecological Data*. [Unpublished report for Dorset Council]

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APPENDIX I: Plant species recorded 8th November 2021

Species	Common Name	Status¹	Frequency²
<i>Acer pseudoplatanus</i>	Sycamore		O-LF
<i>Agrostis canina</i>	Velvet Bent		O-LA
<i>Agrostis capillaris</i>	Common Bent		O
<i>Agrostis curtisii</i>	Bristle Bent		R-O
<i>Alliaria petiolata</i>	Garlic Mustard		R
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass		O
<i>Betula pendula</i>	Silver Birch		O-LF
<i>Betula pubescens</i>	Downy Birch		F-LA
<i>Blechnum spicant</i>	Hard Fern		O-LF
<i>Brachypodium sylvaticum</i>	False Brome		R-O
<i>Carex demissa</i>	Common Yellow-sedge		R
<i>Carex pilulifera</i>	Pill Sedge		R-O
<i>Castanea sativa</i>	Sweet Chestnut		R
<i>Corylus avellana</i>	Hazel		R
<i>Crataegus monogyna</i>	Hawthorn		O
<i>Digitalis purpurea</i>	Foxglove		R
<i>Dryopteris affinis agg</i>	Scaly Male Fern		R
<i>Dryopteris dilatata</i>	Broad Buckler-fern		O
<i>Dryopteris filix-mas</i>	Male Fern		R
<i>Fagus sylvatica</i>	Beech		O
<i>Fraxinus excelsior</i>	Ash		R
<i>Glechoma hederacea</i>	Ground Ivy		R-O
<i>Hedera helix</i>	Ivy		O
<i>Holcus lanatus</i>	Yorkshire-fog		O
<i>Ilex aquifolium</i>	Holly		F-LA
<i>Juncus bulbosus</i>	Bulbous Sedge		R
<i>Juncus effusus</i>	Soft Rush		O
<i>Lonicera periclymenum</i>	Honeysuckle		F
<i>Lotus pedunculatus</i>	Marsh Bird's-foot-trefoil		R
<i>Molinia caerulea</i>	Purple Moor-grass		O-LA
<i>Pinus sylvestris</i>	Scot's Pine		A
<i>Potamogeton polygonifolius</i>	Bog Pondweed		R
<i>Potentilla erecta</i>	Tormentil	NT	R-O
<i>Prunus spinosa</i>	Blackthorn		R-O
<i>Pteridium aquilinum</i>	Bracken		O-LA
<i>Quercus robur</i>	Pedunculate Oak		O
<i>Ranunculus flammula</i>	Lesser Spearwort	VU	R
<i>Rubus fruticosus agg.</i>	Bramble		F
<i>Salix cinerea</i>	Grey Willow		O-LF
<i>Teucrium scorodonia</i>	Wood Sage		O
<i>Ulex europaeus</i>	Common Gorse		R

Species	Common Name	Status¹	Frequency²
<i>Urtica dioica</i>	Stinging Nettle		R
<i>Veronica chamaedrys</i>	Germander Speedwell		O
<i>Veronica officinalis</i>	Heath Speedwell	NT	R
<i>Veronica serpyllifolia</i>	Thyme-leaved Speedwell		R

¹ status follows Stroh *et al* 2014 *A Vascular Plant Red List for England*

² **D** = Dominant; **A** = Abundant; **F** = Frequent; **O** = Occasional; **R** = Rare; **L** = Local (e.g. **LF** = Locally Frequent)

APPENDIX II: Other species recorded 8th November 2021

Species
Bryophytes
Liverworts
<i>Calypogeia fissa</i>
<i>Pellia epiphylla</i>
Mosses
<i>Atrichum undulatum</i>
<i>Campylopus introflexus</i>
<i>Dicranella heteromalla</i>
<i>Dicranum scoparium</i>
<i>Eurhynchium striatum</i>
<i>Hypnum cupressiforme</i>
<i>Hypnum jutlandicum</i>
<i>Kindbergia praelonga</i>
<i>Polytrichum commune</i>
<i>Polytrichum formosum</i>
<i>Pseudoscleropodium purum</i>
<i>Rhytidiadelphus squarrosus</i>
<i>Sphagnum auriculatum</i>
<i>Sphagnum palustre</i>
<i>Sphagnum subnitens</i>

APPENDIX III: Photographs



FIG 1. Typical Pine dominated woodland in the southeast of the site.



FIG 2. Pine woodland in the south of the site with abundant Rhododendron in the understorey.



FIG 3. Mixed woodland in the south of the site with Birch becoming abundant.



FIG 4. Part of the stand of W4 Downy Birch – Purple Moor-grass woodland in the north of the site which qualifies as Wet Woodland Priority Habitat.



FIG 5. The Lily Pond, a deep acid pond with Water Lilies and Pondweed on the surface. The grassy edge on the west side is heavily grazed by Sika Deer.



FIG 6. The old workings in the northeast of the site with a mixture of tree species, the ground flora is very sparse due to heavy shade.