

Picket and Clanger Wood SSSI Breeding Bird Survey 2017

August 2024

Natural England Research Report RP2973

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Catalogue code: RP2973

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Keywords

Woodland, scrub, habitat, bird, survey, Trowbridge, SSSI

Acknowledgements

Natural England thanks the Woodland Trust for permission to carry out this bird survey on their land.

Citation

Smith, J., and Mowat, C. 2017. Picket and Clanger Wood SSSI: Breeding Bird Survey 2017. RP2973. Natural England.

Executive summary

In 2017 a breeding bird survey was carried out in Picket and Clanger Wood SSSI in order to assess the condition status of the woodland breeding bird assemblage, which is a notified feature for the site.

The Common Bird Census methodology was used, carrying out four early morning visits and one dusk visit to record the bird species present. Bird breeding status was recorded as confirmed, probable or possible, and the overall bird score was compared with that at notification. The breeding bird assemblage scored 13. This is more than a 25% reduction below the baseline score of 33. The woodland breeding bird assemblage feature is in unfavourable condition. Reasons for the decline are explored, including habitat and management changes, and national declines of some species.

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1 Introduction

Picket and Clanger Wood SSSI is an ancient woodland located south of Trowbridge, and close to the village of Yarnbrook at OS grid reference ST 875543 (Figure 1). It is an isolated habitat in an agricultural landscape on the eastern side of the very busy, fast A350 road. The wood with its car park, footpaths and rides is of importance as a local beauty spot and recreational area for walkers from the nearby towns and villages.

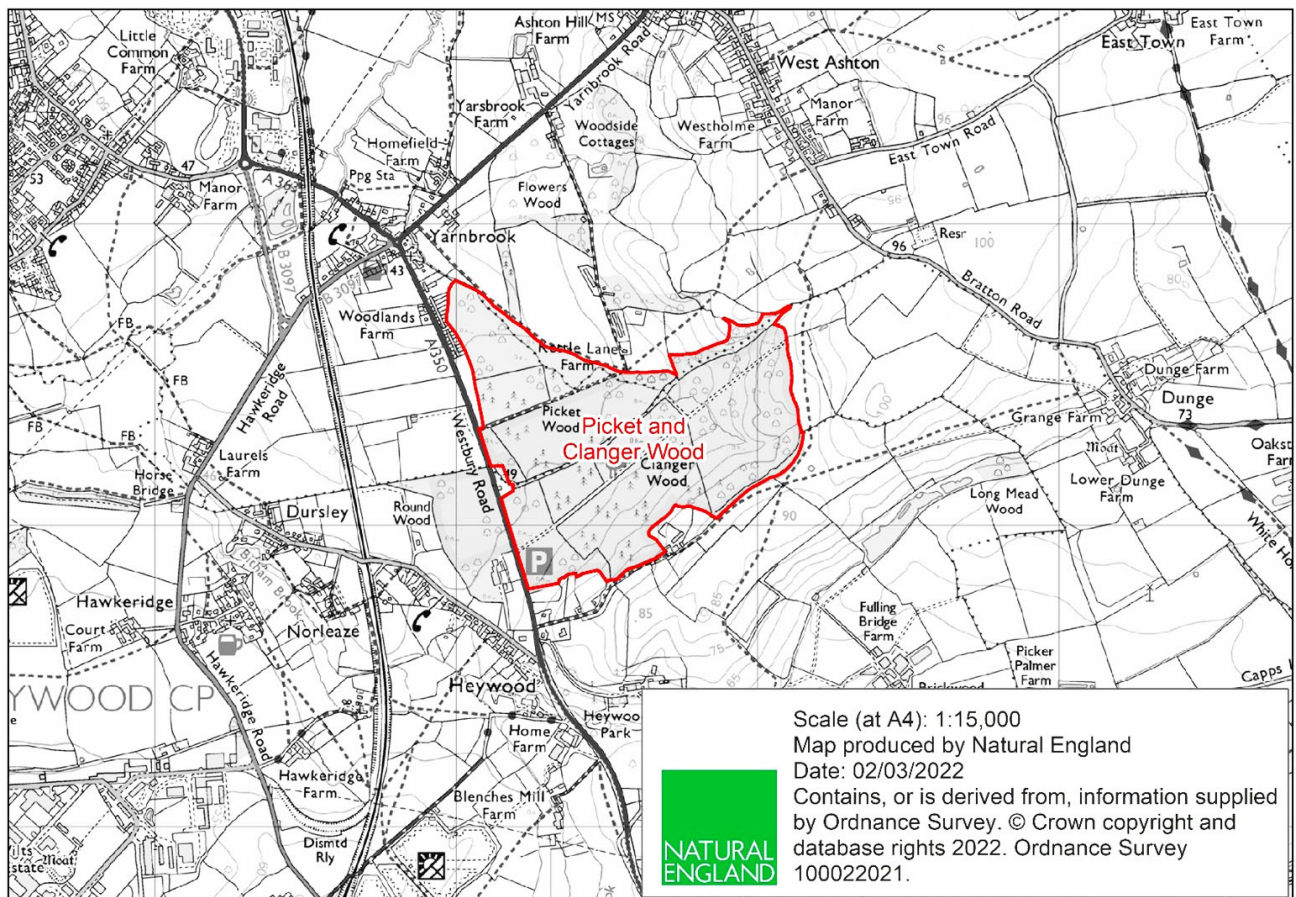


Figure 1. Map showing location of Picket and Clanger Wood SSSI

Despite the fact that over two thirds of this ancient woodland was planted up in the 1970s with conifers, a lot of the semi-natural broad-leaved woodland had been retained amongst the planting, and it was subsequently designated a SSSI in 1989. Some of the plantation strips and blocks have been subject to wind-throw or have been removed under a scheme of “Plantations on Ancient Woodland Sites” (PAWS) restoration. The deciduous woodland lies on heavy Oxford clays and comprises mainly the National Vegetation Classification (NVC) community W8 *Fraxinus excelsior* – *Acer campestre* - *Mercurialis perennis* Ash - Field Maple – Dog’s Mercury, interspersed with mature oak groves, NVC community W10 *Quercus robur* – *Pteridium aquilinum* – *Rubus fruticosus* Oak - Bracken - Bramble. Other features for which the SSSI was originally designated were its outstanding assemblage of

woodland butterflies, a separate outstanding Lepidoptera assemblage (moths) and an assemblage of bird's characteristic of ancient woodland and scrub. Figure 2 shows a photograph of the wood taken in a mature stand of trees with an open clearing of young coppice.



Figure 2. Photograph of closed and open canopy in Picket and Clanger Wood

Unfortunately, over the last 40 years, both the Lepidoptera and bird species assemblages have shown a marked decline. Numbers of butterfly species such as Duke of Burgundy, small pearl-bordered, pearl-bordered and dark-green fritillaries were already in a sharp decline even as the site was notified, and it is thought that this has been a consequence of the planting of the conifers in the 1970s. As for birds, the original citation states 'The nightingale, with 15-20 breeding pairs, is prominent among the outstanding range of birds at this site'. Other breeding species included 'the summer visitors cuckoo, turtle dove, garden warbler and blackcap, and hole nesters such as willow-tit, nuthatch, green woodpecker, great-spotted woodpecker and tawny owl'. In contrast, a breeding bird survey undertaken in 2008 (Rob Turner, Wiltshire Ornithological Society) states that taking the common residents of 1990 to 2000 as a guide, there was a complete absence of the scrub warblers (garden warbler and whitethroat), and there were no willow warblers or nightingales 'once the pride of the wood' (the reasons for this are explored below).

The 2017 breeding bird assemblage condition assessment has been undertaken against this background of changing bird populations.

2 Methods

In order to assess the favourable condition status of a breeding bird assemblage, a scoring system is applied. According to published guidelines (JNCC 2004), a breeding bird assemblage is assigned a score derived from summing individual species scores at a

particular date (usually a year). The assemblage may be notified as a protected feature of the SSSI if the score reaches or exceeds the threshold published in the guidelines for selection of SSSIs. The assemblage score at the date of notification is known as the baseline score. In subsequent monitoring, if the breeding bird assemblage reaches the baseline score, it is deemed to be in favourable condition; if it fails to reach the baseline score and is more than 25% below, it will be in unfavourable condition. The 25% variation is designed to allow for natural variation in species composition and annual variation due to seasonality.

Breeding bird species of a particular assemblage/habitat type are scored on the basis of scarcity. Only one pair needs to be confirmed or probable breeders to score - this monitoring standard does not take abundance into account. Very common species such as blue tit or robin do not score.

The 2017 survey was carried out using the standard Common Bird Census (CBC) methodology (Gilbert et al 1998) in order to be able to compare the results with previous surveys. This also complies with the published guidelines (JNCC 2004). The survey route (Appendix 1) was chosen so as to consider birds occupying areas with different woodland management. The route went through mature woodland, plantation woodland with conifers, a cleared plantation area, areas of early and mid-succession coppice, rides, and footpaths.

Prior to this survey, the previous bird survey had been carried out in 2008 by Rob Turner for the Wiltshire Ornithological Society (the results are included with the results of this survey below for comparison). The 2008 survey went along a different route from the 2017 survey: it included the central ride (the 2017 crossed the central ride at two points) and the area to the south of it.

The 2008 survey comprised six visits; in 2017, four visits were carried out due to time constraints, with an additional dusk/evening survey. The direction of the route in 2017 was clockwise the first two times and in the opposite direction the final two times in order to vary the time a particular part of the site was visited. The route was walked at a slow pace so that all the birds detected could be located and identified by ear or by sight, and indicated, using British Trust for Ornithology (BTO) species and behaviour codes (Appendix 2), on a 1:3000 OS map. The dates and personnel for each survey were as follows:

Table 1. Dates and personnel for each visit in 2017

Date	Personnel	Time	Weather	Methods
11.04.17	CM, JS, KL	06.20-9.45	Clear, still sunny later	CBC
28.04.17	CM, JS	05.55-09.15	Fair	CBC

Date	Personnel	Time	Weather	Methods
11.05.17	JS	05.45-07.48	Dry, partial cloud	CBC
31.05.17	KL, FM, SG, SP	21.20-23.00	Fair	Dusk/evening walk
01.06.17	JS, CM	05.32-08.25	Misty, warming to 12C, sunny later	CBC

Key: CM Catherine Mowat; JS Jude Smith; KL Katie Lloyd; FM Fergus Mitchell; SG Sarah Grinsted; SP Stephanie Payne

3 Results

For Picket and Clanger SSSI, the original notification was based on the Nature Conservancy Council Guidelines for Selection of Biological SSSIs (1983). Even though the site was designated in 1989 and new criteria were published in 1989 (Nature Conservancy Council 1989), the older guidelines were used for this site. At the time of notification, the breeding bird assemblage score would not have met the 1989 Guidelines minimum threshold of 39, but it did surpass the 1983 minimum threshold score of 30.

Regarding the breeding bird assemblage baseline score, the criteria sheet for the SSSI (Appendix 3) indicates a BTO score of 37, which should be the baseline score for the site. However, this score includes some errors and a re-evaluation of the list of species breeding at the time of notification (summary of breeding birds 1978 to 1986, Appendix 4), gives a confirmed score of 33. Therefore, 33 is the baseline score for the site with which subsequent survey scores are compared.

The breeding bird assemblage for the 2017 survey scored 13 – Table 2. The decrease in score between notification and 2017 is therefore much greater than the 25% reduction that is permissible to meet favourable condition. The woodland breeding bird assemblage feature is therefore deemed unfavourable.

Note: Blank cells indicate that the species, while being present, was not recorded as confirmed breeding or probable breeding, so consequently, was not assigned a score. Zeros indicate that the species was confirmed breeding but is not assigned a score according to the 1983 criteria. See Appendix 2 for explanation for possible ('Poss'), probable ('Prob'), confirmed ('Yes') breeding. Totals at the bottom of the table also provide the number of breeding species (including those that do not score). Note that grasshopper warbler and lesser whitethroat have not bred since 1983 and 1984 respectively (Appendix 4), and so neither species counts towards the baseline score. They have been retained in the table as they were present in the survey period which provided the baseline data. They were not present in 1989, 2008 or 2017.

Table 2. Baseline data compared with 2008 and 2017 survey data (Note: some cells are left blank)

Species	Baseline data: summary of breeding birds 1978 to 1986, compiled 08/08/1987	2008 survey – see Appendix 5		2017 survey	
	Score	No.	Score	No.	Score
Blackbird	0	11 (Yes)	0	8 (Yes)	0
Blackcap	1	9 (Yes)	1	8 (Yes)	1
Bullfinch	1	2 (Yes)	1	Present	
Buzzard		1 (Poss)	0		
Carrion Crow	1	No		1 (Poss)	
Chaffinch	0	5 (Yes)	0	6-10 (Yes)	0
Chiffchaff	1	11 (Yes)	1	7-9 (Yes)	1
Cuckoo	2				
Dunnock	0	1 (Yes)	0	2 (Poss)	0
Goldcrest	0	3 (Yes)	0	3-4 (Yes)	0
Jackdaw	1				
Jay	1	1 (Prob)	1	2 (Prob)	1
Kestrel	2			1 (Poss)	
Magpie	1				
Nightingale	3				
Nuthatch	2	2 (Prob)	2	4-7 (Yes)	2
Owl, Tawny	2	1 (Prob)	2	1 (Prob)	2

Species	Baseline data: summary of breeding birds 1978 to 1986, compiled 08/08/1987	2008 survey – see Appendix 5		2017 survey	
	Score	No.	Score	No.	Score
Pheasant	0	2 (Prob)	0		
Raven				1 (Poss)	0
Robin	0	Many (Yes)	0	18-20 (Yes)	0
Sparrowhawk	2	1 (Yes)	2	1 (Poss)	
Starling	0				
Thrush, Song	0	5 (Yes)	0	2-3 (Yes)	0
Thrush, Mistle	1			1 (Prob)	1
Tit, Blue	0	10 (Yes)	0	15-20 (Yes)	0
Tit, Coal	0	2 (Yes)	0	10-14 (Yes)	0
Tit, Great	0	5 (Yes)	0	4-11 (Yes)	0
Tit, Long-tailed	1	3 (Yes)	1		
Tit, Marsh	1				
Tit, Willow	2				
Treecreeper	1	1 (Prob)	1	2 (Prob)	1
Turtledove	1				
Warbler, Garden	2			1-2 (Poss)	0

Species	Baseline data: summary of breeding birds 1978 to 1986, compiled 08/08/1987	2008 survey – see Appendix 5		2017 survey	
	Score	No.	Score	No.	Score
Warbler, Grasshopper					
Warbler, Willow	0				
Whitethroat					
Whitethroat, Lesser					
Wood Pigeon	0	2 males (Yes)	0	2 (Yes)	0
Woodpecker, Great-spotted	2	1 (Yes)	2	1-3 (Yes)	2
Woodpecker, Green	2			1-2 (Yes)	2
Wren	0	10 (Yes)	0	16-25 (Yes)	0
Totals	33	22 (Yes, Prob)	16	19 (Yes, Prob)	13

For the 2017 survey, the numbers of breeding territories per species for the transect have been approximated; in any case territory numbers are not required for condition assessments. It should be noted that whilst the survey methods (CBC) were similar in 2008 and 2017, the survey routes and numbers of visits were different for each.

A number of species were recorded in 2017 but could not be included in the final score as it was not possible to state whether they were probable or confirmed breeding species. Such species include bullfinch and garden warbler - heard singing on only one occasion, and kestrel, sparrowhawk and raven which were present on one visit. However, even if further visits would have suggested that these were at least probable breeders, this would only have provided an additional score of 10, bringing the total to 23, and the status of the bird assemblage would still be unfavourable. It is very likely that a survey of four visits (with, effectively, fewer for recording the migrant species potentially arriving slightly later in

the season) will result in under-recording of breeding behaviour necessary to establish probable or confirmed breeding.

Photographs illustrating the woodland habitats encountered during the bird surveys are provided in Appendix 6.

4 Discussion

Many of the species that are important for the breeding assemblage score for the SSSI were lost some time ago. Rob Turner noticed changes starting to happen well before the 2008 survey, having also undertaken bird ringing in the wood between 1978 and 1995. But even up to 2000, nightingale, garden warbler, whitethroat, willow warbler and marsh tit occurred regularly, and willow tit and grasshopper warbler were also recorded (although the latter two species were not noted as breeding). By the 2008 survey however, garden warbler, willow warbler, grasshopper warbler, whitethroat, willow and marsh tit were absent. Except for a possible record of garden warbler (on the last 2017 visit) the results nine years later are consistent with these changes.

Nightingale will initially have suffered from the lack of a coppice cycle, representing a loss of their favoured early coppice stage (Photograph 4 Appendix 6), but this species has declined and contracted its range nationally, and it is now rare outside of south-east England. In Wiltshire, there are still low numbers of nightingales on the Salisbury Plain Ministry of Defence ranges and in the Cotswold Water Park.

Changes in management of woodlands, such as a reduction of coppicing leading to over-mature scrub in the case of nightingale and other scrubland warblers such as willow and garden warbler, or the loss of damp grassy / scrubby areas for grasshopper warbler, might not be the only reason for their demise at Picket and Clanger. Perhaps more importantly, all these birds are long distant migrants, and national declines are associated with the hazards of migration and the poor condition of the wintering grounds in sub-Saharan Africa and beyond. In addition, whilst willow warblers have declined by 31% between 1974 and 1999, this has been concentrated mainly in the south of Britain, and therefore its range is moving northwards, possibly related to climate change. The loss of marsh tit also reflects a national trend, although this is possibly due to the loss of suitable habitat and “tidying up” the countryside. All this is in the context of national losses in insects:

www.sciencemag.org/news/2017/05/where-have-all-insects-gone.

A question to be asked when the number of species falls in a site is whether the loss is due to on-site factors such as changes in management or is due to off-site factors. If loss is overwhelmingly due to off-site factors such as those affecting the wintering grounds of migrant species, or climate change, then it could be argued that changes in site management will not bring these species back. Table 3 summarises current understanding of factors affecting species trends in the UK for those species that have become locally extinct (although garden warbler was heard on the last visit in 2017, it was not possible to tell whether it was in fact breeding). Together with the Table 4 below and the discussion in the above two paragraphs, it points to the fact that providing more understorey in Picket

and Clanger Wood might allow recolonization of many of these species. However, the widespread decline in willow tit and willow warbler is less understood and might not respond to such management. Appendix 7 provides recommendations for management in the wood that would benefit the bird population.

Table 3. Long-term trends in former key species for Picket and Clanger Wood

(Source: BTO website: www.bto.org/about-birds/birdtrends/2017)

Species	Long-term trend (bto website)
Garden warbler	Long term decline probably reflects changes in their wintering (sub-Saharan) environment but is also associated with reduced productivity or juvenile survival. This species is tending to move northwards, the probability of local extinction correlates with warmer May temperatures (possibly reflecting a change in phenology which makes breeding less suitable), but increased understorey vegetation increases the likelihood of its occurrence.
Nightingale	It is among a suite of species that winter in the humid zone of West Africa and correspondingly are showing the strongest population declines among our migrant species. There is strong evidence that deer grazing is having a negative effect on Nightingale numbers. Conditions on the wintering grounds, such as changes in habitat, are also likely to have carry-over effects into the breeding season. Several studies have highlighted the benefit of habitat management for this species, involving coppicing and control of deer numbers to promote the heterogeneous vegetation structure that Nightingales need.
Marsh tit	There is good evidence that changes in the habitat quality of woodlands, particularly a loss of understorey, have been responsible for the decline in Marsh Tits. Conservationists are focusing on providing more mature woodland (marsh tits are hole

Species	Long-term trend (bto website)
	nesters) and promoting woodland connectivity
Willow tit	Willow tits have been in decline since the 1970's and have become locally extinct in an ever-growing number of local haunts. The loss is probably due to habitat degradation.
Whitethroat	In recent years breeding numbers of this species has increased slightly, following dramatic falls in the 1960's. There is good evidence that the major changes in the population of this species have been driven by conditions on its wintering grounds and so are related to overwinter survival.
Willow warbler	A migrant species, there is a decline mainly in southern Britain, with Scottish populations remaining unaffected. The causes of decline are uncertain. Decreased breeding success is likely to be an important driver of the decline in the south-east, and the differing trends across the UK suggest that climate change (or possibly habitat changes occurring over wide areas) could be a factor behind the changes. However, problems on migration or in winter have not been completely ruled out.

The table below gives further indication of habitat requirements for different woodland species within the breeding season.

Table 4. Habitat requirements for different breeding woodland bird species at Picket & Clanger Wood.

Species	Breeding habitat requirement
Bullfinch	Mixed understorey scrub layers for resting and feeding, blossom shrubs such as hawthorn and sloe
Dunnock	Dense understorey, scrubby edge habitats (including hedgerows)

Species	Breeding habitat requirement
Garden Warbler	Young succession scrubby woodland, forest edge, mid-stage coppice, young plantations, bramble
Goldcrest	Mature conifer, mixed forest, mature trees for nest cavities
Marsh Tit	Mixed woodland
Mistle Thrush	Mature woodland / forest
Nightingale	Active coppice management 0 -3 years age, young conifer plantation, scrub habitats within woodland, thickets
Song Thrush	Matrix of scrub, mature trees, and open areas
Treecreeper	Woodland, old trees, hollows
Willow Tit	Untidy damp woods
Willow Warbler	Developed shrub layer in woods, bramble
Whitethroat	Young to medium scrub in more open areas

Although there have been declines noted above, in 2017 there were strong populations of non-scoring wren, robin, blackbird, blue tit, coal tit and great tit. Chiffchaff and blackcap also continue to flourish in Picket and Clanger Wood, as do nuthatch and goldcrest, presumably because there is plenty of mature woodland. Numbers of both these latter species are on the rise nationally.

6 Conclusion

The breeding bird assemblage for the 2017 survey scored 13. This is more than a 25% reduction below the baseline score of 33. The woodland breeding bird assemblage feature is therefore deemed unfavourable.

7 References

Fahrig, L., & Rytwinski, T. 2009. Effects of Roads on Animal Abundance: An Empirical Review and Synthesis. *Ecology and Society* 14.

Fuller, R.J., & Moreton, B.D. 1987. Breeding bird populations of Kentish sweet chestnut (*Castanea sativa*) coppice in relation to age and structure of the coppice. *Journal of Applied Ecology*, 24, 13-27.

Gilbert, G., Gibbons, D.W., & Evans, J. 1998: Bird monitoring methods, RSPB.

Helldin, J.O., Collinder, P., Bengtsson, D., Karlberg, A., and Askling J. 2013. Assessment of traffic noise impact in important bird sites in Sweden - a practical method for the regional scale. *Oecologia Australis* 17:48-62.

JNCC 2004. *Common Standards Monitoring Guidance for Birds (updated version)*. ISSN 1743-8160 (available online at <http://jncc.defra.gov.uk/page-2224>)

Nature Conservancy Council. 1983. Guidelines for selection of biological SSSIs. Peterborough

Nature Conservancy Council. 1989. Guidelines for selection of biological SSSIs. Peterborough

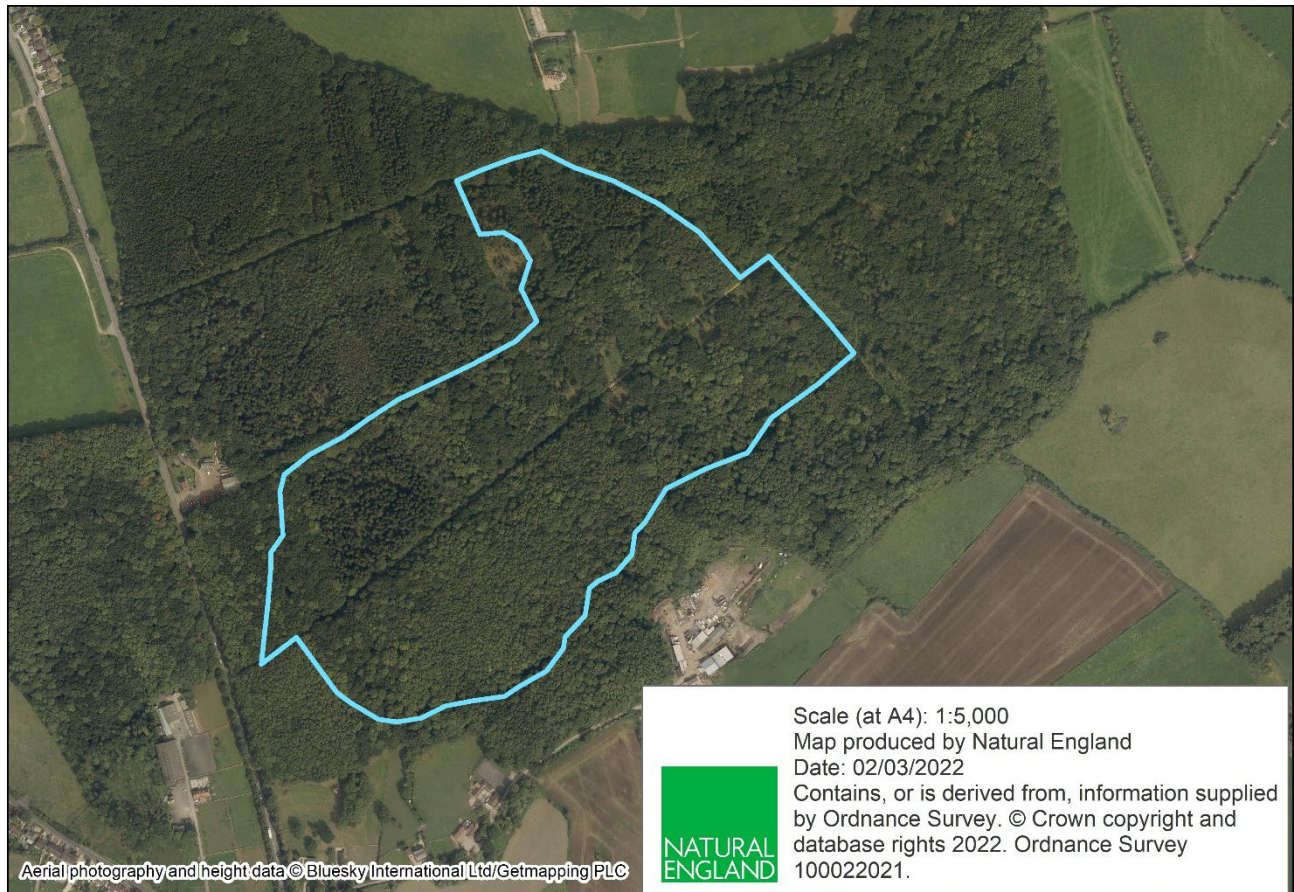
Reijnen, R., & Foppen, R. 1997. Disturbance by traffic of breeding birds: evaluation of the effect and considerations in planning and managing road corridors. *Biodiversity and Conservation* 6, 567-581. DLO-Institute for Forestry and Nature Research, Wageningen, The Netherlands.

Robinson, R.A., Leech, D.I., Massimino, D., Woodward, I., Eglinton, S.M., Marchant, J.H., Sullivan, M.J.P., Barimore, C., Dadam, D., Hammond, M.J., Harris, S.J., Noble, D.G., Walker, R.H. and Baillie, S.R. (2016) *BirdTrends 2016: trends in numbers, breeding success and survival for UK breeding birds*. Research Report 691. BTO, Thetford. www.bto.org/birdtrends

Turner, R. 1988 and 2008 breeding bird survey tables from internal Natural England files.

Appendices

Appendix 1 Survey route



Appendix 2 Behaviour showing evidence of breeding (JNCC 2004)

Common Standards Monitoring Birds guidance

Records can be considered as proven/confirmed or probable breeding records if one of the following observations is made:

- Bird apparently holding territory (singing in suitable habitat in breeding period (April to July), singing in same area on more than one visit, singing against neighbouring birds, aggressive toward other adults)
- Courtship or display behaviour seen, including copulation
- Adult seen nest building or carrying nesting material
- Adult seen entering or leaving a nest site
- Nest found with incubating female, eggs, or nestlings
- Anxiety calls/agitated behaviour of adult bird indicating presence of nest or young
- Distraction display or injury feigning by adult bird
- Brood patch on a trapped bird
- Adult carrying food or faecal sac
- Adult seen with young

- Recently fledged young seen or heard (begging calls)
- Used nest found (with fresh signs of recent use such as presence of faecal material, eggshell fragments)
- Records can be considered as possible breeding records when the following observations are made:
- Adult birds using the site during the breeding period (April to July), but with no evidence of breeding (as above) should be recorded only as seen. Species recorded as seen (possibly breeding) must not be included in breeding assemblage assessments.

Appendix 3 Criteria sheet for SSSI notification in 1989

This shows that the baseline breeding bird score (BTO index) was 37 (a compilation of breeding bird data 1978 to 1986). Note, however, that there are errors in the criteria sheet which are discussed in the main body of the report. The BTO index should have been 33.

Criteria Sheet

Site Name: Picket and Clanger Wood

County / Scheduling Unit: Wiltshire

This form is designed for use with the Revised (March 1983) PPG on the Selection of Biological SSSI. A separate form will be issued by Geology Branch for sites with geological interest.

Notable Features	PPG Ref
<p>A / B Habitat Type:</p> <p>WOODLAND</p> <p>(Stand type 2Aa 'typical' wet ash-maple wood with 2Ab wet maple wood and 10A invasive elm)</p>	<p>PPG not referenced</p>
<p>C Species / Groups:</p> <p>Lepidoptera – outstanding assemblage:</p> <p>High brown fritillary <i>Argynnis adippe</i> 100</p> <p>Duke of Burgundy <i>Hamearis Lucina</i> 40</p> <p>Pearl-bordered fritillary <i>Bolovia euphrasyne</i> 40</p>	<p>c ii (c) c ii (a) PPG not referenced PPG not referenced c ii (a) PPG not referenced PPG not referenced c ii (c) c vii (e)</p>

Notable Features	PPG Ref
Small Eggar <i>Eriogaster lanestris</i> 100 Narrow-bordered bee hawkmoth <i>Hamaris tityus</i> 40 Lesser-spotted pinion <i>Cosmis diffinis</i> 40 Outstanding assemblage of woodland butterflies (35 spp.) Birds: breeding community (woodland) - PTO	
C Indices (only where greater than PPG value) Vascular Plants: nil Amphibia: nil BTO Index: 37 Invertebrates (specify groups): 320 Lepidoptera	C i (b) C iv (c) C vii (e) C ii (c)

Remarks: (Name those groups (Vascular Plants – Invertebrates) for which there is adequate information, but which do not meet SSSI criteria, and are therefore not listed above).

Not applicable

Signed (ARO): Jane Brookhouse
Date: 14/07/1988

Appendix 4 Baseline data: summary of breeding birds 1978 to 1986, compiled by Rob Turner 08/08/1987

Note 1: Some cells in the ‘Status’ column have been left blank as there were not enough recordings of the bird to put it into a category. See the ‘Comments’ column for further information in these cases.

Note 2: Some cells in the ‘Comments’ column have been left blank if the bird was given a status and no additional comment was recorded.

Species	Status [R – resident all year (breeds in wood), S – summer visitor only (breeds in wood), P – seen on passage at migration time, W – winter visitor only, does not breed]	Comments
Grey Heron		Sometimes seen overflying the wood.
Mute Swan		Birds from nearby Westbury Ponds overfly the wood.
Canada Goose		Overflew the wood on one occasion only.
Mallard		Often seen overflying, probably from the ponds and also Capps Lane Lake.
Shoveler		Overflew the wood once only (5 birds).
Buzzard		Rare visitor from M.O.D. Ranges. Overflies.
Sparrowhawk (ringed in Clanger Wood)	R	
Hobby		Sometimes hawks insects over wood. Uncommon.
Kestrel	R	
Pheasant	R	Bred 'artificially' in Picket Wood.
Moorhen		Seen in wet area on 1 occasion only.
Lapwing		Winter flocks often overfly the wood.
Snipe		Occasionally overflies mainly in winter.
Woodcock		Probably used to breed, but now scarce winter visitor. Many shot out in Picket Wood during winter.
Curlew		Birds from Dilton area overfly in summer.
Whimbrel		1 record only of 3 overflying in spring.
Lesser black-backed Gull		Overflies in large numbers to roosts at Chew and The Severn in late autumn/winter. Small numbers summer.
Herring Gull		Scarce. Occasional few overfly in winter.
Common Gull		As for Lesser b-b Gull.

Species	Status [R – resident all year (breeds in wood), S – summer visitor only (breeds in wood), P – seen on passage at migration time, W – winter visitor only, does not breed]	Comments
Black-headed Gull		As for Lesser b-b Gull.
Common Tern		1 flew over wood 1986 (May).
Stock Dove		Surprisingly uncommon. Not proved breeding.
Wood Pigeon (ringed in Clanger Wood)	R	
Turtle Dove	S	
Collared Dove (ringed in Clanger Wood)		Occasional visitor – not common.
Cuckoo (ringed in Clanger Wood)	S	Does not breed every year.
Long-eared Owl		Vagrant. 1 record only.
Tawny Owl (ringed in Clanger Wood)	R	
Barn Owl		Seen occasionally hunting in young conifer areas at dusk in winter.
Little Owl		Seen and heard regularly on field boundaries adjacent to wood.
Nightjar		Heard 'churring' on one occasion but not proved to breed.
Swift		Feeding parties often present over wood in summer.
Hoopoe		Scarce vagrant – 1 record.
Green Woodpecker (ringed in Clanger Wood)	R	
Great Spotted Woodpecker (ringed in Clanger Wood)	R	
Lesser Spotted Woodpecker (ringed in Clanger Wood)		2 records, both of the same bird in 1982 and 1985 (individual identified by ring). Could breed?
Skylark		Autumn migration over wood. Breeds nearby.
Sand Martin		A few seen annually in hirundine flocks.

Species	Status [R – resident all year (breeds in wood), S – summer visitor only (breeds in wood), P – seen on passage at migration time, W – winter visitor only, does not breed]	Comments
Swallow		Feeds over wood in summer.
House Martin		Feeds over wood in summer.
Tree Pipit		Passage birds most years in small numbers.
Meadow Pipit		Overflies the wood mostly in autumn.
Yellow Wagtail		1 record of passage bird overflying.
Grey Wagtail		A few overfly.
Pied Wagtail		Can overfly at any time of year in small numbers.
Starling	R	
Jay (ringed in Clanger Wood)	R	Common
Magpie (ringed in Clanger Wood)	R	
Jackdaw	R	Large flocks at certain times of year.
Rook		Overflies. No rookery in wood.
Crow	R	
Wren (ringed in Clanger Wood)	R	
Dunnock (ringed in Clanger Wood)	R	Hosts Cuckoo in all probability.
Grasshopper Warbler (ringed in Clanger Wood)	S	Does not breed since habitat now wrong. Several pairs bred 1978-83.
Sedge Warbler (ringed in Clanger Wood)	P	Only 1 record.
Reed Warbler (ringed in Clanger Wood)	P	9 up until 1982. None since.
Icterine Warbler		Vagrant 1 record.
Garden Warbler (ringed in Clanger Wood)	S	
Blackcap (ringed in Clanger Wood)	S	No wintering recorded.
Whitethroat (ringed in Clanger Wood)	S	Bred regularly until 1982 but now a passage migrant in small numbers.

Species	Status [R – resident all year (breeds in wood), S – summer visitor only (breeds in wood), P – seen on passage at migration time, W – winter visitor only, does not breed]	Comments
Lesser Whitethroat (ringed in Clanger Wood)	S	In small numbers up to 1984.
Willow Warbler (ringed in Clanger Wood)	S	
Chiffchaff (ringed in Clanger Wood)	S	
Wood Warbler (ringed in Clanger Wood)		Scarce passage migrant. 1 record.
Goldcrest (ringed in Clanger Wood)	R	
Firecrest		Vagrant. 1 record.
Pied Flycatcher		Scarce passage migrant. 2 records.
Spotted Flycatcher	P	Surprisingly, has not bred.
Redstart (ringed in Clanger Wood)		Scarce passage migrant. Has not bred, but pair present early 1986 – yet to see outcome.
Robin (ringed in Clanger Wood)	R	
Nightingale (ringed in Clanger Wood)	S	Average 15 pairs breed. Probably one of the most important sites for this species in SW.
Blackbird (ringed in Clanger Wood)	R	
Redwing (ringed in Clanger Wood)	W	
Song Thrush (ringed in Clanger Wood)	R	
Mistle Thrush	R	
Fieldfare	W	
Marsh Tit (ringed in Clanger Wood)	R	
Willow Tit (ringed in Clanger Wood)	R	But scarce, probably 1-2 pairs.
Blue Tit (ringed in Clanger Wood)	R	Uses boxes.
Great Tit (ringed in Clanger Wood)	R	Uses boxes.
Coal Tit (ringed in Clanger Wood)	R	

Species	Status [R – resident all year (breeds in wood), S – summer visitor only (breeds in wood), P – seen on passage at migration time, W – winter visitor only, does not breed]	Comments
Long-tailed Tit (ringed in Clanger Wood)	R	
Nuthatch (ringed in Clanger Wood)	R	
Treecreeper (ringed in Clanger Wood)	R	
House Sparrow		No records!
Chaffinch (ringed in Clanger Wood)	R	
Bullfinch (ringed in Clanger Wood)	R	
Greenfinch (ringed in Clanger Wood)		Has only so far been recorded in non-breeding season but could possibly breed in wood.
Siskin (ringed in Clanger Wood)	W	
Goldfinch (ringed in Clanger Wood)		As for Greenfinch.
Linnet (ringed in Clanger Wood)		As for Greenfinch.
Redpoll (ringed in Clanger Wood)	W	(1 mealy recorded).
Crossbill	P	In small numbers since 1983.
Reed Bunting (ringed in Clanger Wood)		Has bred occasionally but can be absent altogether some years.
Total species recorded in, or over Clanger Wood: 92 Total species proved breeding: 39 + Reed Bunting = 40 Total species ringed in Wood: 45		

Appendix 5 Breeding Bird Survey 2008 (Turner, R)

Rob Turner

I visited the wood on six occasions between 10th May and 16th July spending approx. two hours during each visit walking a similar transect around the wood.

On each occasion I endeavoured to plot species territories and locate any evidence of breeding using BTO criteria in common use.

Species List	Evidence	Breeding record
Pheasant	2 males	Probably bred
Buzzard	Pair over wood	Probably bred
Sparrowhawk	Female food carrying	Confirmed breeding
Wood Pigeon	2 males	Probably bred
Tawny Owl	Calling at dusk	Probably bred
Great S Woodpecker	Heard on all visits	Confirmed breeding
Wren	10 territories. Young seen	Confirmed breeding
Dunnock	Surprisingly only one territory	Confirmed breeding
Robin	17 Territories. Young seen	Confirmed breeding
Blackbird	11 Territories. Young seen	Confirmed breeding
Song Thrush	5 Territories	Confirmed breeding
Blackcap	9 Territories	Confirmed breeding
Chiffchaff	11 Territories	Confirmed breeding
Goldcrest	3 Territories	Confirmed breeding
Spotted Flycatcher	1 passage bird late in season	Breeding not confirmed
Long-tailed Tit	3 pairs. Young seen	Confirmed breeding
Blue Tit	10 pairs. Young seen	Confirmed breeding
Great Tit	5 Pairs. Young seen	Confirmed breeding

Species List	Evidence	Breeding record
Coal Tit	2 pairs Young seen	Confirmed breeding
Nuthatch	Heard on 2 occasions	Probably bred
Treecreeper	1 pair	Probably bred
Jay	1 pair	Probably bred
Chaffinch	5 Territories. Young seen	Confirmed breeding
Bullfinch	2 Territories. Young seen	Confirmed breeding

Notable species not present, which were regular in the wood between 1978 – 2000, were: nightingale, garden warbler, whitethroat, willow warbler and marsh tit.

Appendix 6 Photographs

The location within the 2017 transect survey is indicated.



1. Central ride, showing occasional scalloped edges (left of ride) supporting dense low scrub.



2. Area in the east with a more varied structure, with both full canopy trees and dense patches of understorey



3. Early coppice, north-east – the coppice canopy has not yet closed over.



4. Hornbeam coppice, north-east of wood where the canopy has closed over.



5. Even-aged stand, central, showing very little understorey.



6. Mixed stand, east part of survey area, featuring a large mature tree, a stand of conifers behind it, and patches of dense understorey.



7. Cleared conifer strip, west, showing an open clearing with some bare ground



8. Young deciduous stand, south-west, where canopy trees are semi-mature and there is scattered understory.

Appendix 7 Recommendations

7.1 High deciduous forest

- There is a need to increase the amount of understorey in the high forest areas. It was for example especially noticeable on each survey that on the southern part of the route (Photograph 5, Appendix 6), with only a sparse understorey and an even-aged stand of semi-mature/mature trees, there was the least bird activity.
- The area to the south mentioned above would ideally be gradually thinned to encourage a mixed age woodland and allow larger trees to develop. There is a general lack of fallen dead wood, and therefore some felled trees and brash should be left in situ. This will provide additional habitat for ground-nesting birds.
- Few veteran trees are present. Large trees (Photograph 6, Appendix 6) are good for birds as their veteran features such as holes and snagged branches provide nesting habitat for cavity nesting species for example tits and nuthatches (as well as woodland bats), and rot also provides feeding habitat. They should be retained (except where a danger to the public) and enhanced. Tree surgery and the creation of halos (removal of vegetation around the tree to give a band of space and light to the older tree) around the more obviously open grown trees (for example on the east and south-east side) will help ensure their longevity. The addition of bird nesting boxes, including owl boxes, could also ameliorate this lack of habitat in the short term.

7.2 Scrub and coppice management

- On the whole, there is insufficient scrub, and 'saum' (structurally graded edge habitat), and therefore ride widening, glade formation, and large scallops into the conifer plantations (Photograph 1, Appendix 6) will increase this habitat. However, for the scrub warblers it is not necessary to keep clearance too tidy. Bullfinch was heard on one occasion during the 2017 survey (also present in 1988) and would benefit from the encouragement and maintenance of blackthorn and hawthorn scrub.
- By way of reference, a before-and-after study between 1975 and 1984 at Longbeech Wood, Kent found that overall bird diversity decreased with coppice age and declined markedly at canopy closure (Fuller & Moreton 1987). Warblers, finches, and buntings were most abundant in young coppice (0-3 years of growth), whilst thrushes and tits increased in abundance with age since coppicing.
- Some of the coppicing has been carried out where the standards are too closely spaced, with insufficient light penetration to permit vigorous stool regrowth, resulting in a thin, 'leggy' coppice. Coppicing would be best only carried out where there is plenty of light to reach the stools.
- Further larger areas of dense scrub and coppice would support the scrub warblers that were once widespread, including garden warbler, whitethroat and possibly nightingale (whilst the latter have declined nationally, they may yet return with the correct habitat provision). The area of conifer still covers a large proportion of the SSSI and therefore felling this area could provide an ideal opportunity to restore

areas of both active coppice with standards and high forest over the medium to long term. To this end the potential to create new coppice through advance conifer felling / early PAWS restoration should be explored.

- Brambles are beneficial to many species. Nightingales nest in brambles, often within 1m of the ground, and several butterfly species and other insects feed on the flowers.
- During the survey there were no signs of heavy deer browsing, but it would be worth carrying out an assessment to determine whether deer browsing is having an impact on the woodland / scrub structure and ability for regrowth.

7.3 Rides and clearings

In general, whilst there are many paths within the wood, the transitions between rides and high forest are insufficiently wide. This point also relates to the first bullet point of the last section – a more diverse edge between open ground and canopy layer needs to be developed.

- There is little permanent open space. Whilst this may be hard to create with the existing ditch system, the creation of bands of open space to the outer side of the ditches, or via connecting glades could be investigated.
- Consider allowing wind-throw clearings (Photograph 7, Appendix 6) within the conifer woodland to develop unaided but retain some open glades within the wind-throw areas, so that the regrowth is not uniform. The wind-throw areas are likely initially to develop a scrub growth of bramble, birch, and willow, which would potentially support scrub birds such as those above or the willow and garden warbler. Again, a gradation of vegetation heights from a low grass / herb sward to low scrub, then trees will benefit birds in general.
- However, note that whilst conifers support fewer species, these do include goldcrest, coal tit and blackcap, and there will be some benefit of retaining some scattered individuals.

7.4 Bats

- Most of the conifer blocks should be removed over time, being mindful that, as well as birds such as goldcrest, and the winter visitors redpoll and siskin, these could be important for bats including the rare Bechstein's bat in winter (if hibernating nearby). Other evergreens such as holly have been shown to be important cover for Bechstein's, and whilst apparently rare in this wood, holly bushes could be encouraged.

7.5 People

- Where offsetting / compensation is an option, new housing schemes around Trowbridge should be encouraged to consider providing funds for woodland management. This could include visitor impact surveys, and the purchase and management of a wide buffer strip around the outside of the wood.
- Management of people away from areas that are ear-marked as sensitive, by encouraging people to keep to paths to reduce disturbance, and subtly blocking newly created and minor footpaths.
- Woodland near the main road is similarly even-aged in places and breeding birds may be impacted upon by excessive road noise (see Reijnen & Foppen 1997, Fahrig & Rytwinski 2009; Helldin et al 2013). An investigation of the impact of traffic noise together with possibilities for road calming could be an offsetting option for local planners, with the additional benefit that it could also reduce the risk of a dangerous accident from happening at the junction of the woodland carpark and the A350.
- Consider planting a dense row of conifers along the A350 to block out traffic noise and pollution.

