

Marble Hill Park Breeding Bird Survey

Report for
J & L Gibbons

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Executive summary

Salix Ecology was commissioned by J & L Gibbons to undertake a breeding bird survey of Marble Hill Park with specific reference to song thrush. This would support a planning application to undertake a Heritage Lottery Funded project to restore the historic landscape of the park.

The proposed works would see extensive changes to the blocks of woodland around Marble Hall House. This area is a hotspot for birds including song thrush which is potentially breeding in the locality. Any works will undoubtedly prevent or disrupt any breeding birds if not carried out with due care and potentially contravene the Wildlife and Countryside Act 1981.

This breeding bird survey was carried out using a modified version of the standard British Trust for Ornithology's Breeding Bird Survey methodology. This is the main scheme for monitoring the population changes of the UK's common breeding birds. The approach was designed to identify bird species which are likely to be breeding on site and map their approximate locations.

Overall, 23 species of birds were recorded on site. Of these, 10 species, showed characteristic behaviour associated with breeding and the surrounding habitat was suitable. A further 4 species had suitable habitat on site which made nesting a possibility but no supporting behaviour was evident.

This report suggests mitigation to ensure compliance with current law and suggests measures to enhance breeding opportunities for the song thrush.

1.0 Introduction and Scope

1.1 Background

- 1.1.1 Salix Ecology was commissioned by J & L Gibbons to undertake a breeding bird survey of Marble Hill Park with specific reference to song thrush. This would support a planning application to undertake a Heritage Lottery Funded project to restore the historic landscape of the park.
- 1.1.2 The survey findings are presented in this report. The likely impact of proposed works on breeding birds and in particular the song thrush is reviewed and recommendations for maintaining and enhancing their populations within the park provided.

1.2 Personnel

The ecological survey was carried out by Denis J Vickers BSc (Hons), FLS, CBiol, MRSB, MCIEEM. Denis is a full member of the Chartered Institute of Ecology and Environmental Management and is subject to the Institute's code of professional conduct when undertaking ecological work.

1.3 Scope of the report

- 1.3.1 The breeding bird survey was carried out using a modified version of the standard Breeding Bird Survey methodology (BTP/JNCC/RSPB). The Breeding Bird Survey (BBS) is the main scheme for monitoring the population changes of the UK's common breeding birds. The approach was designed to identify bird species which are likely to be breeding on site and map their approximate locations.

1.4 Objectives

- To identify the location of song thrushes which are likely to be breeding on site
- To identify the location of other birds which are likely to be breeding on site
- To review the likely impact of proposed works on populations of breeding birds particularly song thrush
- To suggest mitigation and possible habitat enhancements required to maintain and / or enhance breeding bird populations including song thrush

1.5 Site context and status

- 1.5.1 Marble Hill House and Park is located in Twickenham TW1 2NL. The site lies between Richmond Road to the North and The River Thames to the south. The centroid O.S. Grid reference is TQ 171737.
- 1.5.2 Marble Hill Park is a component site of Marble Hill Park and Orleans House Gardens Site of Local Importance for Nature Conservation and is a grade II listed park.

2.0 Methods

2.1 BTO Methodology

- 2.1.1 Given the size of Marble Hill Park, a modified British Trust for Ornithology (BTO) Breeding Bird Survey was applied.
- 2.1.2 In line with standard BTO methodology, the site was visited three times, in this case from mid-May to mid-July. On the first survey visit a standard transect route was devised which covered most of the site where breeding birds might be encountered (i.e. woodland, trees and shrubs). Habitats had been previously mapped as part of a phase one habitat survey conducted in 2015 by Land Management Services (2015). Habitats along the route were noted and compared with the phase one mapping to confirm that significant changes had not occurred. On the initial visit the transect was followed anticlockwise. Visits 2 and 3 saw the transect followed in a clockwise and then anticlockwise direction respectively. All survey visits started before 09.00 in the morning on each day and were completed by mid-day. Visit 1 was completed in just less than two hours, visits 2 and 3 lasted a minimum of three hours.
- 2.1.3 Weather conditions were sunny and warm for visits 1 and 2 which were undertaken on 31st May and 14th June 2017 respectively and mild and overcast for transect 3 which was completed on 11th July 2017.
- 2.1.4 All bird species heard or seen, either perching or in flight across the site were recorded. In particular, observations of all breeding bird activity were recorded e.g. mating, birds carrying nesting material or food, male birds in song holding territories, active nest sites, the presence of juvenile birds and any other activities indicating possible breeding at the site. Binoculars (x10) were used where appropriate to assist in identification of species. Particular attention was paid to the song thrush.
- 2.1.5 During each visit the approximate locations of bird species, which were likely to be breeding on site, were determined by sight or sound and mapped over copies of the habitat map produced for Land Management Services (2015). Data from the three visits were transferred to a single map at the end of the survey (Appendix 1). Species which were recorded in the same general location on all three of the visits were seen as holding territory in that vicinity. A list of all species of birds occurring on site was also compiled (Table 1) and their likely on-site breeding status stated. Additionally, the local and national conservation statuses of these species were quoted.
- 2.1.6 Where appropriate, if nest sites were confirmed these were described and recorded using a 10-figure grid reference obtained with a WAAS enabled GPS unit. Photographs of interesting were taken where appropriate.

2.2 Limitations

- 2.2 The survey was commenced a month later than optimum. This means that fewer bird records were recorded particularly on the final day of the survey in July. It also means that a lower degree of certainty would be encountered with regards the identification of birds likely to be breeding on site.

3.0 Results

Table 1: List of birds recorded and their conservation status

Species	BTO Code	Breeding	LBAP	BoCC4	S41
Blackbird	B.	Y			
Blackcap	BC	Y			
Black-headed gull	BH			A	
Blue tit	BT	?			
Carrion crow	C.				
Chaffinch	CH	Y			
Chiffchaff	CC	?			
Duncock	D.		Y	A	Y
Feral pigeon	FP				
Goldfinch	GO	Y			
Great tit	GT	Y			
Green woodpecker	G.				
House sparrow	HS	Y	Y	R	Y
Jackdaw	JD				
Long-tailed tit	LT				
Magpie	MG	?			
Robin	R.	Y			
Ring-neck parakeet	RI				
Song thrush	ST	Y	Y	R	Y
Starling	SG	?	Y	R	Y
Swift	SI		Y	A	
Woodpigeon	WP	Y			
Wren	WR	Y			

3.1 Notes:

3.1.1 BTO code is the British Trust for Ornithology's standard abbreviation for bird species

3.1.2 Breeding: Y = likely to be breeding on site – exhibiting one or more of the characteristics stated in 2.1.3 with the approximate position mapped (Appendix 1); ? = species possibly breeding but not exhibiting any of the characteristics listed in 2.1.3 (position not mapped).

3.1.3 LBAP = London Biodiversity Action Plan, subject of a specific Species Action Plan or is a Species of Conservation Concern in London.

<http://downloads.gigl.org.uk/website/London%20BAP%20Priority%20Species%20List%202007.pdf>

3.1.4 BoCC4 = Species listed in *Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man* (Eaton *et al*, 2015). The criteria for red and amber lists appear below:

3.1.5 Red list criteria:

- Globally threatened
- Historical population decline in UK during 1800–1995
- Severe (at least 50%) decline in UK breeding population over last 25 years, or longer-term period (the entire period used for assessments since the first BoCC review, starting in 1969).
- Severe (at least 50%) contraction of UK breeding range over last 25 years, or the longer-term period

3.1.6 Amber list criteria

- Species with unfavourable conservation status in Europe (SPEC = Species of European Conservation Concern)
- Historical population decline during 1800–1995, but recovering; population size has more than doubled over last 25 years
- Moderate (25-49%) decline in UK breeding population over last 25 years, or the longer-term period
- Moderate (25-49%) contraction of UK breeding range over last 25 years, or the longer-term period
- Moderate (25-49%) decline in UK non-breeding population over last 25 years, or the longer-term period
- Rare breeder; 1–300 breeding pairs in UK
- Rare non-breeders; less than 900 individuals
- Localised; at least 50% of UK breeding or non-breeding population in 10 or fewer sites, but not applied to rare breeders or non-breeders
- Internationally important; at least 20% of European breeding or non-breeding population in UK (NW European and East Atlantic Flyway populations used for non-breeding wildfowl and waders respectively)

3.1.7 S41 = Species of principal importance

- There are 943 species of principal importance included on the S41 list. These are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.
- In accordance with Section 41(4) of the Natural Environment and Rural Communities (NERC) Act 2006 the Secretary of State will, in consultation with Natural England, keep this list under review and will publish a revised list if necessary.

3.2 Likely breeding activity by species

3.2.1 Overall, 23 species of birds were recorded flying over or on site. Of these 10 species exhibited the characteristics highlighted in 2.1.3, the habitat was suitable and they were likely to be breeding. A further 4 species had suitable habitat on site which made nesting a possibility but no supporting behaviour was evident.

3.3.2 Although likely breeding species are located all around the transect (Appendix 1) there are several hotspots, particularly the woodland blocks around Marble Hill House, the south-western corner of the park and towards the north-western corner of the site. Song thrush was recorded in all three of these hotspots.

3.3 Confirmed nest sites

3.3.1 No active nest sites recorded.

4.0 Evaluation

4.1 General

4.1.1 17 of the 23 species of birds recorded on the site are currently not of conservation concern in the UK and as such are green listed by BoCC4. The remaining six species are either amber or red listed as a result of severe local or international decline e.g. in breeding populations, overwintering birds and the geographical range of species (see 3.1.5 and 3.1.6). Of these six species, five were identified as London Biodiversity Action Plan species.

4.2 House sparrow and song thrush

4.2.1 Only two species, the house sparrow and song thrush are likely to be breeding on site and recognised by the BTO/JNCC/RSPB as being of conservation concern in the UK. Additionally, both species are listed under Section 41 of the NERC Act 2006 as of principal importance in England and identified as Biodiversity Action Plan species in Greater London.

4.2.2 House sparrow was seen flying from Marble Hill House, song thrush was recorded in the three locations identified as breeding bird hotspots (3.3.2 and Appendix 1).

4.3 Likely impact of works

4.3.1 The proposed works will see extensive changes to the blocks of woodland around Marble Hall House. These areas are hotspots for birds including song thrush which is potentially breeding in the locality. Any works here will undoubtedly prevent or disrupt any breeding birds if not carried with due care and potentially contravene the Wildlife and Countryside Act 1981 (as amended).

5.0 Recommendations

5.1 Further surveys

5.1.1 As the breeding bird survey was conducted about a month later than optimal it was not possible to state with a high degree of certainty exactly where song thrushes were holding territory. However, the areas identified do represent the likely locations where this was taking place. If a greater degree of certainty is required then a new survey should be conducted next year between mid-April and Mid-June.

5.2 Birds and the law

5.2.1 All birds, their eggs and nests are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is an offence to kill, injure or take any wild bird, or to take or destroy their eggs. It is also an offence to take damage or destroy the nest of any wild bird while it is in use or being built. Certain species (not recorded at Marble Hill Park) receive additional special protection under Schedule 1 of the Act and under Annex 1 of the European Community Directive on the conservation of Wild Birds (79/409/EEC).

5.3 Mitigation

5.3.1 In order to comply with 5.2.1 it is recommended that any works be undertaken outside of the bird nesting season which runs from March to August inclusive. If this proves impossible for whatever reason, then a search for breeding birds should be conducted by a suitable qualified ecologist within the 24 hours prior to site clearance. If any birds' nests are in danger of being damaged or destroyed by the works, then activities in the vicinity of the nest should be suspended until young birds have fledged.

5.3.2 Bird boxes should be fitted to existing trees or the walls of buildings to provide additional nesting opportunities for Birds of Conservation Concern (BoCC) particularly house sparrow and song thrush. Boxes should be positioned between three and four metres height with a clear flight-path towards the box available. It should face between the north and east to avoid too much sunlight and the wettest winds.

5.3.3 The Schwegler Sparrow Terrace Box is suitable for the erection on buildings – two of these boxes will suffice.

5.3.4 The Schwegler 1B General Purpose Nest Box would be a suitable model for song thrush (and can also be used by some other bird species).

5.3.5 Bird boxes suitable for the song thrush should be sited on mature trees within the restored woodland areas around Marble Hill House (four in number) and on trees in the bird hotspots at the south-west corner and near the north-western corner of the park (three in each location).

6.0 References

BTO/JNCC/RSPB. *The Breeding Bird Survey: BTO – British Trust for Ornithology*.
<https://www.bto.org/volunteer-surveys/bbs> Website accessed 31-07-2017.

Land Management Services, 2015. *Marble Hill Park: Preliminary Ecological Appraisal for English Heritage July 2015*

London Biodiversity Partnership, *London Biodiversity Action Plan Priority Species*.
<http://downloads.gigl.org.uk/website/London%20BAP%20Priority%20Species%20List%202007.pdf> Website accessed 31-07-2017.

Mark Eaton, Nicholas Aebischer, Andy Brown, Richard Hearn, Leigh Lock, Andy Musgrove, David Noble, David Stroud and Richard Gregory. *Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man*. *British Birds* 108, December 2015, 708–746

Natural England. *Habitats and species of principal importance in England*.
<http://webarchive.nationalarchives.gov.uk/20140605093420/http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>
Website accessed 31-07-2017

Appendix 1: Breeding Bird Survey



