



Bird Survey

April-June 2023

Assessment for
Swale Borough Council

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Issued By
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1.0 Introduction

1.1 Purpose of this Report

Simon Ginnaw was commissioned by Swale Borough Council to carry out a Breeding Bird Survey for the site: Milton Creek Country Park. The purpose for this Bird Survey is to assess onsite habitats for the suitability to support nesting and breeding bird species and will involve recording incidental bird sightings during the field surveys over a three month period, and noting management prescriptions. This report will highlight Schedule 1 and UK Biodiversity Action Plan (BAP) species and also Species of Conservation Concern. Further surveys may be required to obtain a detailed list of bird species and bird communities in key habitat areas, and/or to map breeding territories.

1.2 Survey Location

Milton Creek Country Park covers an area mostly incorporated in the grid reference coordinates: TQ9165. On the northern boundary the park includes a small percentage of TQ9065. Milton Creek Country Park is situated on the western side of Sittingbourne. To the north of the park lies the Swale Estuary.

1.3 Survey Objectives

The key objectives of this survey are as follows:

- Produce a species list of birds found at the site during the year's breeding season.
- Highlight any important records: Schedule 1 and UK Biodiversity Action Plan (BAP) species and also Species of Conservation Concern
- Provide management prescriptions for birds in relation to the site.

1.4 Surveyor Information

Simon Ginnaw (MSc (DIC) BSc (Hons)) undertook each survey.

1.4.1 Simon Ginnaw (SG): MSC (DIC) BSc (Hons)

Simon has 15+ years' experience in undertaking bird surveys. He is competent using different survey methods and has an extensive knowledge of bird ecology; running adult education classes, training workshops, guiding tours across the UK and internationally, and working extensively with the RSPB and BTO. Simon has worked in Kent for 10 years and has 23 years of field experience. Simon is also a Trainee Bird Ringer in Kent.

1.5 Summary of Relevant Legislation

The primary legislation affecting wild birds in England and Wales is the Wildlife & Countryside Act (1981) as amended. The basic principle of this act is that all wild birds, their nests, and eggs are protected by law and some rare species are afforded additional protection from disturbance during the breeding season. The Wildlife & Countryside Act (1981) states that “it is an offence, with certain exceptions, to:

- intentionally kill, injure or take any wild bird,
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built,
- intentionally take or destroy the egg of any wild bird,
- intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building or is in, on or near a nest with eggs or young; or disturb the dependant young of such a bird”.

1.6 United Kingdom Conservation Status of Birds

The fifth major review of the status of birds occurring in the United Kingdom, Channel Islands and the Isle of Man – Birds of Conservation Concern 5 (Eaton et al 2022) presents lists of conservation concern based on assessments using objective listing criteria and most recent data. The listing criteria assess global conservation status, historical population decline, recent population decline (numbers and geographical range), European conservation status, rarity, localised distribution, and international importance of populations. Lists are denoted Red, Amber and Green in a simple ‘traffic light’ system to provide a single, easily understood measure for each species to convey concern and hence to help set priorities for conservation action. Species are assigned to each list depending upon the scale of population decline and concern which includes breeding and non-breeding population:

- Red list criteria – Severe population decline over 25 years/longer term,
- Amber list criteria – Moderate population decline over 25 years/longer term,
- Green list criteria – Species not currently considered of conservation concern.

United Kingdom Biodiversity Action Plan Bird Species are those identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP) and included on a list of priority bird species, initially created between 1995 and 1999, and subsequently updated in response to the Species and Habitats Review Report published in 2007. The UK BAP has recently (July 2012) been succeeded by the UK Post-2010 Biodiversity Framework, which is focused at a country-level rather than at a UK-level with the list of priority bird species remaining an important reference source for bird conservation.

2.0 Methodology

2.1 Field Survey

A total of seven visits were made to the site during spring of 2023, using a methodology based upon a combination of Common Bird Census methodology, devised by the British Trust for Ornithology (BTO), and the national Breeding Bird Survey (BBS) techniques, jointly devised by the BTO, Royal Society for the Protection of Birds (RSPB) and the Joint Nature Conservation Committee (JNCC). Weather conditions were mostly dry and sunny, and visibility was good throughout. Each site visit was for 2-3 hours, with 5 visits starting from sunrise, and 1 visit starting 2 hours before sunset as recommended by the Bird Survey Guidelines. The same route was taken that has been used for the last 4 surveys to maintain consistency.

2.1.1 Equipment

Simon was equipped with Zeiss Victory binoculars, and a Swarovski BTX 115 telescope. As part of the assessment a GPS unit was used to map the position of the recorder.

2.2 Survey Limitations

It should be noted that the extent and location of bird activity could vary both within and between years. There were no limitations regarding access to the site, safety or weather.

2.3 Survey Assessment

A number of criteria are available to determine the conservation status of those bird species recorded. These criteria aid in evaluating the value of the breeding bird assemblage. The most appropriate of these are:

Birds of Conservation Concern 5 (Eaton et al., 2015): Under this approach, UK bird populations are assessed using a quantitative criteria to determine the population status of each species, which can then be placed on one of three lists; Red, Amber or Green (see below).

- Red list species are of high conservation concern, being either globally threatened, having historical UK population declines between 1800 and 1995 or a rapid population decline or breeding range contraction by 50% or more in the last 25 years.

- Amber list species are of medium conservation concern due to a number of factors, for example having suffered between 25% and 49% contraction of UK breeding range or a 25-49% reduction in breeding or non-breeding populations over the last 25 years. Species which have a five year mean of 1-300 breeding pairs (bp) in the UK or an unfavourable European conservation status or for which the breeding population in the UK represents 20% or more of the European breeding populations are also listed on the Amber list.
- Green list species have a favourable conservation status.

Schedule 1 of the Wildlife and Countryside Act (1981) – The Wildlife and Countryside Act affords greater protection to certain breeding species that are considered appropriately at risk nationally and are as such listed as specially protected under Schedule 1.

Local and National Biodiversity Action Plans (BAP) – The Kent Biodiversity Action Plan lists species for which conservation targets exist within the local area. To assess the overall breeding bird assemblage, Fuller (1980) described a method for assessing the ornithological interest of sites, whereby the importance was defined by the number of breeding species present as shown in the centre column of Table 1 below:

Table 1: Assessment Methodology

Level of Importance	Number of Breeding Species	
	Fuller (1980) Criteria	Adapted Criteria
Local	25-49 species	< 25 species
District	-	25 – 49 species
County	50 – 69 species	50 – 69 species
Regional	70 – 84 species	70 – 84 species
National	85+ species	85+ species

For the purposes of this assessment, Fuller’s (1980) geographical levels have been adapted, so that Fuller’s “Local” importance is assumed to correspond to District importance as described in the IEEM (2006) guidelines. An assemblage comprising fewer than 25 species is therefore considered to be of local importance or less. Since the publication of the criteria in 1980, declines have occurred in many bird populations, and for this reason it is considered appropriate to recalibrate the categories in this way.

3.0 Results

3.1 Field Survey Results

Overall 76 species of birds were recorded during the field survey:

Table 2: Field Survey Results

Species					Scientific Name	Max Count
Avocet	Sch1	UK	B1,2,3,4	KRDB3	Recurvirostra avosetta	4
Barn Owl	Sch1				Tyto alba	1
Black-headed Gull					Chroicocephalus ridibundus	11
Black-tailed Godwit	Sch1	UK	B1&2	KRDB1	Limosa limosa	55
Blackbird					Turdus merula	14
Blackcap					Sylvia atricapilla	9
Blue Tit					Cyanistes caeruleus	7
Carrion Crow					Corvus corone	31
Cattle Egret					Bubulcus ibis	2
Cetti's Warbler	Sch1		B3	KRDB3	Cettia cetti	13
Chaffinch					Fringilla coelebs	4
Chiffchaff					Phyloscopus collybita	9
Collared Dove					Streptopelia decaocto	9
Common Buzzard					Buteo buteo	1
Common Moorhen					Gallinula chloropus	4

Common Redshank					Tringa totanus	6
Common Sandpiper					Actitis hypoleucos	1
Common Tern					Sterna hirundo	1
Common Whitethroat					Sylvia communis	25
Coot					Fulica atra	7
Cormorant			B3	KRDB3	Phalacrocorax carbo	4
Cuckoo		UK	B2	KRDB2	Cuculus canorus	3
Curlew		UK			Numenius arquata	2
Dunnock		UK			Prunella modularis	12
Feral Pigeon					Columba livia domestica	23
Gadwall				KRDB3	Mareca strepera	1
Goldfinch					Carduelis carduelis	4
Great Black-backed Gull			B1	KRDB1	Larus marinus	1
Great Crested Grebe					Podiceps cristatus	1
Great Spotted Woodpecker					Dendrocopos major	2
Great Tit					Parus major	13
Green Woodpecker			B3		Picus viridis	4

Greenfinch					Chloris chloris	7
Greenshank	Sch1				Tringa nebularia	5
Grey Heron			B3	KRDB3	Ardea cinerea	2
Grey Wagtail					Motacilla cinerea	1
Greylag Goose		UK			Anser anser	2
Herring Gull		UK	W2	KRDB2	Larus argentatus	64
Hobby	Sch1		B1		Falco subbuteo	1
House Martin					Delichon urbicum	15
House Sparrow		UK	2&3	KRDB3	Passer domesticus	100+
Jackdaw					Corvus monedula	40
Jay					Garrulus glandarius	1
Kestrel					Falco tinnunculus	1
Lapwing		UK		KRDB2	Vanellus vanellus	20
Lesser Black-backed Gull					Larus fuscus	5
Lesser Whitethroat					Sylvia curruca	2
Linnet		UK	B2 & W3	KRDB3	Carduelis cannabina	2
Little Egret			B2&3	KRDB3	Egretta garzetta	5

Little Grebe			B2		Tachybaptus ruficollis	2
Long-tailed Tit					Aegithalos caudatus	5
Magpie					Pica pica	17
Mallard					Anas platyrhynchos	11
Mediterranean Gull	Sch1		B3	KRDB3	Larus melanocephalus	1
Nightingale			B3	KRDB3	Luscinia megarhynchos	9
Oystercatcher					Haematopus ostralegus	3
Pheasant					Phasianus colchicus	1
Pochard			B1&2	KRDB3	Athya ferina	5
Quail	Sch1				Coturnix coturnix	1
Reed Bunting					Emberiza schoeniclus	1
Reed Warbler			B3	KRDB3	Acrocephalus scirpaceus	9
Robin					Erithacus rubecula	10
Rook					Corvus frugilegus	3
Sedge Warbler					Acrocephalus schoenobaenus	3

Shelduck					Tadorna tadorna	9
Song Thrush		UK	B2		Turdus philomelos	9
Sparrowhawk					Accipiter nisus	1
Starling		UK	B2		Sturnus vulgaris	23
Swallow					Hirundo rustica	4
Swift					Apus apus	26
Teal			B2	KRDB1	Anas crecca	35
Tufted Duck					Aythya fuligula	6
Whimbrel	Sch1				Numenius phlaeopus	3
Wood Pigeon					Columba palumbus	29
Wren					Troglodytes troglodytes	18
Yellow Wagtail		UK		KRDB2	Motacilla flava	1

KEY	
	Species of Conservation Concern – Red Listed, Amber Listed, Green Listed
	Schedule 1 Protected Species, U.K. Biodiversity Action Plan Species (UKBAP)

4.0 Evaluation

4.1 Survey Summary

76 species were recorded in total during the field surveys, making this the highest total across the 9 surveys to date. Of the 76 species recorded during the survey, 9

are Schedule 1 Protected Species, 14 are Red Listed for Conservation Concern, and 31 are Amber Listed for Conservation Concern. 19 species are considered to be of priority in Kent, of 13 species considered priority nationally.

2023 appears to have been notable for new species for the country park, species that have not previously been recorded before. These were Barn Owl, Cattle Egret, Gadwall, Quail, Pochard, and Yellow Wagtail.

The assessment is based on the most up-to-date evidence available and criteria including conservation status at global and European levels and, within the UK: historical decline, trends in population and range, rarity, localised distribution and international importance. The survey shows that just over 26% of the species recorded at the site during the survey period are classed as being threatened and are of conservation concern.

It should be noted, however, that this survey covered a 3-month period and so only covers the bird communities during this period. It is highly likely that the park holds more species, of mixed ecological value. The winter is likely to be of particular importance in the Creek habitat

Table 3: Evaluation of Ecological Value

Species	Scientific Name	Site Value
Avocet	<i>Recurvirostra avosetta</i>	Local
Barn Owl	<i>Tyto alba</i>	Local
Black-headed Gull	<i>Chroicocephalus ridibundus</i>	Local
Black-tailed Godwit	<i>Limosa limosa</i>	Local
Blackbird	<i>Turdus merula</i>	Site
Blackcap	<i>Sylvia atricapilla</i>	Site
Blue Tit	<i>Cyanistes caeruleus</i>	Site
Carrion Crow	<i>Corvus corone</i>	Site

Cattle Egret	Bubulcus ibis	Local
Cetti's Warbler	Cettia cetti	County
Chaffinch	Fringilla coelebs	Site
Chiffchaff	Phyloscopus collybita	Site
Collared Dove	Streptopelia decaocto	Site
Common Buzzard	Buteo buteo	Negligible
Common Moorhen	Gallinula chloropus	Site
Common Redshank	Tringa totanus	Local
Common Sandpiper	Actitis hypoleucos	Negligible
Common Tern	Sterna hirundo	Negligible
Common Whitethroat	Sylvia communis	District
Coot	Fulica atra	Site
Cormorant	Phalacrocorax carbo	Site
Cuckoo	Cuculus canorus	District
Curlew	Numenius arquata	Local

Dunnoek	<i>Prunella modularis</i>	Local
Feral Pigeon	<i>Columba livia domestica</i>	Negligible
Gadwall	<i>Mareca strepera</i>	Negligible
Goldfinch	<i>Carduelis carduelis</i>	Site
Great Black-backed Gull	<i>Larus marinas</i>	Site
Great Crested Grebe	<i>Podiceps cristatus</i>	Negligible
Great Spotted Woodpecker	<i>Dendrocopos major</i>	Site
Great Tit	<i>Parus major</i>	Site
Green Woodpecker	<i>Picus viridis</i>	Site
Greenfinch	<i>Chloris chloris</i>	County
Greenshank	<i>Tringa nebularia</i>	Local
Grey Heron	<i>Ardea cinerea</i>	Site
Grey Wagtail	<i>Motacilla cinerea</i>	Site

Greylag Goose	Anser anser	Site
Herring Gull	Larus argentatus	Regional
Hobby	Falco subbuteo	Negligible
House Martin	Delichon urbicum	Local
House Sparrow	Passer domesticus	Regional
Jackdaw	Corvus monedula	Site
Jay	Garrulus glandarius	Negligible
Kestrel	Falco tinnunculus	Site
Lapwing	Vanellus vanellus	Site
Lesser Black-backed Gull	Larus fuscus	Site
Lesser Whitethroat	Sylvia curruca	Site
Linnet	Carduelis cannabina	Site
Little Egret	Egretta garzetta	Site
Little Grebe	Tachybaptus ruficollis	Site
Long-tailed Tit	Aegithalos caudatus	Site
Magpie	Pica pica	Site

Mallard	Anas platyrhynchos	Local
Mediterranean Gull	Larus melanocephalus	Local
Nightingale	Luscinia megarhynchos	Regional
Oystercatcher	Haematopus ostralegus	Local
Pheasant	Phasianus colchicus	Negligible
Pochard	Athya ferina	Local
Quail	Coturnix coturnix	Site
Reed Bunting	Emberiza schoeniclus	Site
Reed Warbler	Acrocephalus scirpaceus	Site
Robin	Erithacus rubecula	Site
Rook	Corvus frugilegus	Site
Sedge Warbler	Acrocephalus schoenobaenus	Site
Shelduck	Tadorna tadorna	Local
Song Thrush	Turdus philomelos	Local

Sparrowhawk	Accipiter nisus	Site
Starling	Sturnus vulgaris	County
Swallow	Hirundo rustica	Site
Swift	Apus apus	County
Teal	Anas crecca	Site
Tufted Duck	Aythya fuligula	Site
Whimbrel	Numenius phlaeopus	Site
Wood Pigeon	Columba palumbus	Site
Wren	Troglodytes troglodytes	Site
Yellow Wagtail	Motacilla flava	Site

KEY	
	Species of Conservation Concern – Red Listed, Amber Listed, Green Listed

The lowland scrub and creek-side habitat is of county importance for its birdlife, and supports a bird assemblage that would qualify for Local Wildlife Site status and could be put forward for SSSI status.

Below is a summary of some of the key species recorded breeding during the survey period, to help the reader understand their conservation and outline reasons for their given ecological value. This ecological value can differ each year, and so regular annual monitoring provides a true indication of its value.

4.2 Regional Importance

MCCP holds regionally important populations of House Sparrow, Common Starling, Common Cuckoo, Reed Warbler, Grasshopper Warbler, and European Herring Gull.

4.2.1 House Sparrow

The House Sparrow has shown severe population declines and range contractions over the last 25 years. The house sparrow is a UKBAP species, and so identified as being the most threatened and requiring conservation action. House Sparrows have fared differently in each county, with Kent being one of the worst affected, leading it to be a Kent BAP species. The two main reasons for their decline are currently thought to be declines in nest sites and declines in food sources. House Sparrows hole nesters, and feed on invertebrates in the breeding season.

House Sparrows can be encouraged by providing ivy and hedgerows to roost in, holes (such as in nest boxes) to nest in, and areas rich in wildflowers to provide a source of insect food in May and June when they are raising their broods. Small annual plants, such as: chickweed, charlock, fat hen, groundsel, shepherd's purse, dandelion, plantains and vetches; and herbaceous plants, such as: nettle, geranium, honeysuckle and nightshade, are hugely beneficial to house sparrows. Nest-boxes can be easily provided for both these species, and make an ideal community project. As nearby houses repair holes in soffits and roofs, nest sites will be lost. While populations are high, it would be an ideal time to provide additional nest sites for birds to move into and get adapt to. A species-specific survey is recommended in order monitor approximate numbers.

4.2.2 Nightingale

The Nightingale arrives in Britain from its wintering quarters in West Africa in April and stays for barely three months. The British breeding range has contracted by 43% in the last 40 years and numbers are thought to have reduced by more than 90% since the 1960s (Holt et al. 2012). Interestingly, the species has shown a large shift in habitat use. BTO surveys show that in the 1970s, about a quarter of territories were in scrub, with the rest mainly in woodland. More recent surveys reveal an increasing association with scrub habitats (Wilson et al. 2002, Holt et al. 2012).

Understanding the finer points of habitat requirements is essential for successful conservation of any species. In the case of the Nightingale, the requirements are very specific and suitable conditions are transient. Dense continuous vegetation, up to two metres above ground level, provides critical cover for singing Nightingales (Wilson et al. 2005). These birds feed on invertebrates on the ground and require bare patches or short vegetation, which presumably aids detection of prey. Additionally, areas of dense field layer vegetation, such as nettles, can provide nest sites. The highest concentrations of breeding nightingales now occur where all these habitat elements are available in close proximity. Such sites are typically scrub mosaics, usually at fairly low altitude and often in proximity to water. In the absence

of intervention, this combination of vegetation structures disappears as trees grow and the low vegetation is shaded out. Once the scrub starts to become 'leggy', with few areas of impenetrable thicket, it is no longer suitable for Nightingales. Small isolated scrub patches are seldom occupied unless local density is high.

Management that maximises the area of scrub at the vigorous thicket stage is needed for Nightingales. This typically involves rotational cutting on a 10-15 year cycle depending on site conditions. It is better to maintain a coarse-grained mosaic by cutting reasonable-sized blocks rather than many very small and widely dispersed patches of different growth stages. In mature Blackthorn scrub, an effective technique is to cut partially through the stems and layer them over a substantial area to create a 'protective shield' through which new regeneration can grow. In the long term it is uncertain whether rotational cutting of established scrub will provide such good quality habitat as pioneer scrub mosaics regenerating on formerly open land (Fuller 2012).

4.2.3 European Herring Gull

The European Herring Gull is an amber listed BoCC, however are listed in the Kent Red Data Book. The species nests on the roofs of the adjoining warehouses, and are regularly recorded feeding on the areas of sort grass close to the main park entrance, on the neighbouring rubbish site, and adjacent creek and saltmarsh habitat. By maintaining the areas of short grass, and not using any chemicals or nutrient enhancements on the grass, should help locally to support this important breeding population. Monitoring of nesting birds will prove challenging from 2023 onwards due to loss of views because of the surrounding tree growth.

4.3 County Importance

4.3.1 Cetti's Warbler

Cetti's Warbler is a Schedule 1 Protected Species, and listed in Kent's Red Data Book. The population at MCCP appears widespread and in good numbers, and although increasing nationally it is felt MCCP is regionally important due to the criteria above. Breeding sites in Britain are still restricted to lowland areas, where they prefer scattered scrub in reedbed, reed swamp and open water. Males patrol large territories, sometimes up to 450m long. Cetti's Warblers are classed in the Green List for Conservation Concern and are currently recorded as increasing. Therefore, no specific surveys are recommended unless a drop in numbers is picked up during regularly census'.

4.3.2 Common Swift

Common Swifts have suffered a 51% decrease in their breeding numbers in the UK between 1995 and 2015 has made swifts an amber-listed BoCC. The park supports a strong breeding population of swifts that are currently using the church as a breeding site. The mix of grassland, scrub, reedbed habitats, along with the creek

provide a wealth of insect food. To help prevent a decline locally and to help conservation efforts nationally, more can be encouraged by providing nest boxes on the church and on nearby buildings.

4.3.3 Starling

MCCP is important regionally for the Common Starling. Common Starlings have shown severe population declines and range contractions over the last 25 years, making them UKBAP species, a red listed BoCC, and so identified as being one of the most threatened and requiring conservation action. The two main reasons for their decline are currently thought to be declines in nest sites and declines in food sources. Starlings feed their young primarily on leather jackets (the larvae of crane-flies *Tipulidae*), which are more numerous in dry years. The short grassland adjacent to the church makes ideal feeding areas. Nest holes should be provided on suitable trees and buildings nearby to the park.

4.3.4 Greenfinch

The recent decline of the Greenfinch has occurred because of Trichomonosis, a disease that has spread from the pigeon family into finches, and this species is now a red listed BoCC.

The habitat has not changed at MCCP, and there is sadly no habitat management that will benefit the Greenfinch at this stage. Continual monitoring may help research this species' recovery, or allow us discover potential trends that could improve the species chances.

4.4 District Importance

4.4.1 Common Cuckoo

Common Cuckoos are of National Conservation Concern in the UK, and remaining populations need monitoring. Targeted management on the species that raise the chicks of the Cuckoo, such as the Reed Warbler, will help maintain the population on site. Maintaining water levels and a patchwork of age structures in the reedbeds will help encourage and maintain Reed Warbler populations. By allowing scrub to grow allows cuckoos a vantage point to observe reed warblers.

4.4.2 Common Whitethroat

Common Whitethroats are a vulnerable summer migrant, on the increase at MCCP. Managing a patchwork of scrub and grassland will help provide plentiful habitat for this species. Allowing patches of Stinging Nettle will create areas of preferred nesting places.

4.5 Locally Important Species of Conservation Concern

During Spring 2023 Milton Creek was of local importance to 16 different bird species.

4.6 Birds Using The Creek

Due to the habitat of the creek not being under direct management as part of MCCP, below is a summary of its importance, without going into species specifics.

The creek provided habitat for at least 21 different species recorded during the survey period, and is likely to hold more species and numbers of species during the autumn and winter months, so it should be noted that the species identified here form just a small part of the whole creek community.

The two main threats here are varying water levels (which are unable to be controlled here), and disturbance (by humans and animals). Therefore, disturbance is the easier of the two factors to be minimised here. Dog-walkers, walkers and cyclists regularly use the footpath running alongside the creek, so the most feasible method of minimising disturbance would be to create a barrier between the path and the saltmarsh, such as a hedgerow or fence.

6.0 Recommendations

- Create a barrier between the path and the saltmarsh along Milton Creek, such as a hedgerow, to prevent dogs and larger threats from disturbing the creek birdlife.
- Undertake a species-specific house sparrow survey to accurately monitor population levels.
- Provide a variety of nest boxes around the site in suitable positions, for hole-nesting species such as: house sparrows, starlings and swifts.
- Provide nest-boxes for barn owl and kestrel in non-public areas to attract birds in. Barn owls nest off-site, and kestrels use the site for hunting. These could be positioned on the electricity pylons, or on lone telegraph poles within non-public areas.
- Plant wildflower meadows or strips that will provide a source of insects in May and June for house sparrows.
- Consider sowing a wild bird cover crop for wintering finches and sparrows.
- Allow open scrub to develop in some areas of reedbed, and/or around the edge of the reedbed habitats at the park.
- Maintain a mixture of reedbed habitats by managing with a cutting regime in the reedbed and ditch habitats.

- Manage the succession of current scrub habitat with a 7-12 year coppicing rotation to benefit species such as nightingale, warblers, and bullfinches. Consider a similar management plan for planted scrub/tree species across the country park on the damper soils and on banks adjoining ditches and creeks more suited to nightingales.
- Map breeding nightingales and Cetti's warblers, amongst other species, to allow management to be focused on key areas.
- Encourage brambles and elder in these areas to provide fruit for warblers and bullfinches.
- Encourage a more open scrub habitat in drier areas of the park, encouraging grass and wildflowers in between, for linnets and dunnocks.
- Encourage nesting egrets in marshland next to Milton Creek, by placing fake birds in trees to encourage their sociable nature and nest-building.
- Continue regular breeding bird monitoring in order to keep aware of population levels.
- Carry out a Wetland Bird Survey to help understand the annual wetland bird populations better.

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8.0 Appendix 1

Institute of Ecology and Environmental Management

The examples contained in the table below are only for general guidance and other considerations may apply, e.g. features of low value in isolation but which are subject to cumulative national decline may be afforded higher values in certain circumstances. These examples have been tailored to be specific to birds.

Level of Ecological Value	Examples of Criteria
International	<ul style="list-style-type: none"> • An internationally designated site or candidate site (SPA, pSPA, Ramsar site) • A sustainable population of an internationally important species • Sites supporting a breeding population of internationally important species or supplying a critical element of their habitat requirements
National	<ul style="list-style-type: none"> • A nationally designated site (SSSI, ASSI, NNR, MNR) or a discrete area that meets the selection criteria for national designation (e.g. SSSI selection guidelines) • A sustainable population of a nationally important species or a site supporting such a species, i.e. a species listed on Schedules I of the W&CA (as amended), which is a UK Red-listed Bird of Conservation Concern (BoCC) that is not listed as being of unfavourable conservation status in Europe, of uncertain conservation status or of global concern in the UK BAP
Regional	<ul style="list-style-type: none"> • A sustainable population of a species listed as being nationally scarce, or in a Regional BAP or relevant Natural Area on account of its regional rarity or localisation. Sites supporting a breeding population of such a species or supplying a critical element of their habitat requirements • Sites, which exceed the County-level designations but fall short of national selection guidelines, where these occur
County/ Metropolitan	<ul style="list-style-type: none"> • County/Metropolitan sites and other sites which meet the ecological selection criteria for designation • A sustainable population of a species that is listed in a county/metropolitan 'red data book' or LBAP on account of its regional rarity or localisation. Also sites supplying a

	critical element of their habitat requirements
District	<ul style="list-style-type: none"> • A population of a species that is listed in a district/borough BAP because of its rarity in the locality or in the relevant Natural Area profile because of its regional rarity or localisation. Also sites supporting a breeding population of such a species or supplying a critical element of their requirements
Local	<ul style="list-style-type: none"> • A good assemblage of species, which may include low numbers of Amber or Red-listed BoCC
Site	<ul style="list-style-type: none"> • Low numbers of common species of Green-listed BoCC • Low numbers or infrequent use by Amber or Red-listed BOCC
Negligible	<ul style="list-style-type: none"> • Individual sighting of common species of Green-listed BoCC

Appendix 2

Birds

Assessment of bird data can be complex and require expert interpretation therefore, sites should be considered on a case by case basis following advice from local experts such as the Kent Ornithological Society (KOS).

A set of criteria has been established by the members of the Surveys and Conservation Sub-Committee of the KOS, as the relevant expert organisation, for the selection of Local Wildlife Sites on the basis of their bird fauna (which is here taken to mean the naturally occurring populations of wild birds on a site). The criteria are broadly based on those bird species listed as of conservation concern, the selection of Sites of Special Scientific Interest and the Kent Red Data Book.

A bird species (listed below) may be included if it has been recorded as at least probably breeding (as defined by the British Trust for Ornithology) in the majority of recent years for which information is available.

It is appropriate to apply the definition of ‘regularly’ as used by the latest revision of ‘Guidelines for the Selection of Biological SSSIs’.

Sites which meet one or more of the following criteria should be considered for selection:

Criteria

B11

A site that regularly supports more than 2.5% of the county population of any one or more bird species based on the most recent and authoritative data.

Such sites are likely to be important in ensuring that county populations of bird species are maintained. For determining a species breeding population, status can include probable, probable or confirmed breeding. Evidence should be based on bird population data at the site ideally covering the current and four previous years and sites should be judged on the average population over five years, if known. The Kent Ornithological Society may hold up to date information that is not yet published.

B12

A site that regularly supports species on the conservation concern list for Kent (refer to the table below). To qualify for consideration the site should support:

- **10 or more Kent Red Data Book 2 (KRDB2) species in the breeding season; or**
- **Three or more Kent Red Data Book 3 (KRDB3) species (normally this should not include a combination of breeding (B) and wintering (W) species.); or**
- **KRDB1 and/or Schedule 1 species**

Categories

1. Category 1: A UK rare breeding species (either scarce or scarce breeders) as identified by the UK Rare Breeding Birds Panel. Often a Schedule 1 species;

2. A species with 20 or fewer breeding pairs in Kent or which is restricted to 20 or less probable and probable/confirmed breeding tetrads in Kent;
3. A species for which Kent holds more than 15% of the UK breeding population based on the most recent and authoritative data; and
4. A species for which Kent holds >20% of the British population; or species for which Kent holds >4% of the relevant international population (W.Europe or East Atlantic flyway).

The list of bird species of conservation concern within Kent states for each species whether a breeding or wintering population is required for each species. One-off sightings of birds cannot be used as evidence for this criteria. Regular sightings over at least two years within the breeding or wintering seasons would constitute sufficient evidence.

List of Kent species of conservation concern

Species	Category				KRD B1	KRD B2	KRDB 3
	1	2	3	4			
Grey partridge Kent breeding status				W		Y	Y
Quail		B	B		Y		
Brent goose				W			Y
White-fronted goose				W			Y
Garganey	B	B	B		Y		
Shoveler	B						
Gadwall Kent breeding status							Y
Wigeon Kent breeding status		B					
Pintail Kent breeding status	B	B					
Teal		B			Y		
Pochard	B		B				Y
Scaup				W		Y	
Smew				W			
Cuckoo Kent breeding status						Y	
Turtle dove	B		B			Y	
Water rail			B				Y
Corncrake Kent non-breeding status							
Spotted crane Kent breeding status							
Black-necked grebe	B	B	B		Y		
Avocet	B	B	B	W			Y(B/W)
Lapwing Kent breeding status						Y	
Grey plover				W			Y
Little-ringed plover	B	B			Y		
Black-tailed godwit	B	B			Y		
Knot				W			Y
Ruff Kent breeding status							

Dunlin				W		Y	
Woodcock		B					
Snipe		B	B		Y		
Kittiwake		B					Y
Mediterranean gull	B	B	B				Y
Common gull		B			Y		
Great-black backed gull		B			Y		
Herring gull Kent breeding status				W		Y	
Sandwich tern		B					Y
Little tern	B	B	B		Y		
Roseate tern Kent breeding status							
Fulmar		B					
Cormorant		B					Y
Bittern Kent breeding status	B	B					
Grey heron Kent breeding status							Y
Little egret		B	B				Y
Honey buzzard	B	B			Y		
Goshawk Kent breeding status	B	B					
Marsh harrier	B		B				Y
Hen harrier				W			Y
Montagu's harrier Kent breeding status							
Long-eared owl	B	B			Y		
Short-eared owl Kent breeding status	B	B					
Nightjar		B			Y		
Lesser-spotted woodpecker	B			W		Y(B)	Y (W)
Green woodpecker			B				
Hobby	B						
Peregrine	B	B			Y		
Golden oriole Breeding status							
Raven		B			Y		
Marsh tit				W		Y(B)	Y(W)
Willow tit	B	B			Y(B)		Y(W)
Penduline tit Breeding status							
Bearded tit	B	B	B				Y
Woodlark	B	B			Y		
Skylark				W		Y(B)	Y (W)
Cetti's warbler			B				Y
Wood warbler Breeding status		B					
Aquatic warbler Kent non-breeding status						Y	
Reed warbler Breeding status							Y
Marsh warbler		B	B		Y		
Grasshopper warbler		B			Y		
Savi's warbler	B	B	B		Y		
Dartford warbler Breeding status							

Firecrest		B	B		Y		
Starling Breeding status						Y	
Fieldfare Breeding status							
Redwing Breeding status							
Song thrush Breeding status						Y	
Spotted flycatcher Breeding status						Y	
Nightingale			B				Y
Black redstart	B	B	B		Y		
Redstart		B			Y		
Stonechat Breeding status					Y		
Wheatear		B			Y		
House sparrow Breeding status				W		Y(B)	Y(W)
Tree sparrow Breeding status				W		Y(B)	Y(W)
Yellow wagtail Breeding status						Y	
Tree pipit Kent breeding status						Y	
Rock pipit		B			Y		
Siskin		B			Y		
Twite				W			Y
Linnet Breeding status				W		Y(B)	Y(W)
Lesser redpoll				W	Y		Y
Hawfinch	B	B		W	Y(B)		Y(W)
Crossbill Breeding status							
Serin Breeding status							
Corn bunting Breeding status				W		Y(B)	Y(W)
Yellowhammer Breeding status				W		Y(B)	Y(W)

BI3

A site that supports one of the five largest colonies of colonial seabirds (with the exception of herring gull and black-headed gull), grey heron, little egret or sand martin.

BI4

Any site which supports a breeding bird assemblage or wintering waterbird assemblage of county importance as indicated by the species listed in the tables below:

This guideline is intended to identify important assemblages of different bird species and characteristics of important habitats for birds at a county level.

The criteria are intended to be applied to areas of habitat which are more-or-less discrete and homogenous. For example, a large block of woodland should not be treated as part of the same site as a large block of farmland. However, mixed habitats such as small fields, hedges and small woods may be treated as a unit, as may a mix of scrub, swamp, marsh and open water vegetation associated with flood plains, around abandoned quarries or forming part of grazing marsh.

Species regularly using a site for essential activities (such as feeding) while breeding may be included even if they nest outside the site.

The farmland bird species were selected based on those selected for the national farmland bird index, a government indicator of sustainable development.

Mixed habitats

Although the general habitat categories are broad it is recognised that many bird species depend on a combination of habitats and that such habitats might exist within one site.

Two approaches are possible:

- (i) if one (or more) of the composite habitats reaches the threshold value for that habitat, the whole site may be selected if the other habitats clearly form integral parts of the site; and
- (ii) if two habitats are included in one well-defined site, the indices for species which are on both habitat lists and have been recorded for the site should be double-counted; other species score in the usual way; for the site to qualify on this basis, its total score should exceed the qualifying threshold value for the two habitats combined (for example for a woodland and lowland scrub combination $27 + 7 = 34$).

Bird assemblages likely to be of county importance in Kent

Lowland farmland	
Grey partridge	3
Quail	5
Marsh harrier	4.5
Kestrel	3
Hobby	4
Lapwing	3
Stock dove	2
Turtle dove	3
Cuckoo	3.5
Barn owl	4
Tree sparrow	3
Yellow wagtail	3
Linnet	2
Yellowhammer	2
Reed bunting	2
Corn bunting	4

A score of more than 15 points is indicative of farmland habitat that supports a bird assemblage of county importance.

Woodland	
Grey heron	4
Little egret	4
Honey buzzard	6
Goshawk	6
Hobby	4
Woodcock	5
Stock dove	2
Cuckoo	3.5
Long-eared owl	5.5

Green woodpecker	2
Lesser spotted woodpecker	4
Raven	4
Firecrest	4
Willow tit	5.5
Marsh tit	3
Wood warbler	4
Spotted flycatcher	3
Nightingale	3
Redstart	5.5
Tree pipit	4
Siskin	4.5
Lesser redpoll	5
Hawfinch	5

A score of more than 27 points is indicative of woodland habitat that supports a bird assemblage of county importance.

Sand-dunes and saltmarsh	
Shelduck	4
Little egret	4
Oystercatcher	4
Ringed plover	4
Lapwing	3
Black-tailed godwit	6
Redshank	3
Black-headed gull	2.5
Mediterranean gull	4
Herring gull	3
Lesser black-backed gull	3.5
Common gull	5.5
Little tern	5.5
Sandwich tern	4
Common tern	4
Cuckoo	3.5
Grasshopper warbler	5
Stonechat	4.5
Wheatear	5
Rock pipit	5
Linnet	2
Reed bunting	2

A score of more than 26 points is indicative of habitat that supports a bird assemblage of county importance.

Lowland damp grassland	
Shelduck	4
Gadwall	4
Teal	5.5
Pintail	6
Garganey	5
Shoveler	4.5
Pochard	4
Little egret	4
Grey heron	4
Marsh harrier	4.5
Lapwing	3
Snipe	5.5
Black-tailed godwit	6
Redshank	3
Cuckoo	3.5
Grasshopper warbler	5
Yellow wagtail	3
Reed bunting	2

A score of more than 22 points is indicative of habitat that supports a bird assemblage of county importance.

Lowland open waters and their margins	
Shelduck	4
Gadwall	4
Teal	5.5
Pintail	6
Garganey	5
Shoveler	4.5
Pochard	4
Tufted duck	4
Bittern	6
Little egret	4
Grey heron	4
Little grebe	4
Black-necked grebe	5.5
Marsh harrier	4.5
Water rail	4
Avocet	4
Little-ringed plover	5
Ringed plover	4
Lapwing	3
Snipe	5.5
Redshank	3
Black-tailed godwit	6

Redshank	3
Common tern	4
Cuckoo	3.5
Kingfisher	4.5
Bearded tit	4
Willow tit	5.5
Cetti's warbler	3.4
Grasshopper warbler	5
Savi's warbler	6
Marsh warbler	6
Yellow wagtail	3
Grey wagtail	4
Reed bunting	2

A score of more than 41 points is indicative of habitat that supports a bird assemblage of county importance.

Lowland fen (without open water)	
Grey heron	4
Bittern	6
Marsh harrier	4.5
Water rail	4
Snipe	5.5
Cuckoo	3.5
Bearded tit	4
Cetti's warbler	3.5
Grasshopper warbler	5
Savi's warbler	6
Marsh warbler	6
Reed bunting	2

A score of more than 13 points is indicative of habitat that supports a bird assemblage of county importance.

Lowland heathland	
Hobby	4
Snipe	5.5
Redshank	3
Cuckoo	3.5
Long-eared owl	5.5
Woodlark	5.5
Grasshopper warbler	5
Stonechat	4.5
Wheatear	5
Tree pipit	4
Linnet	2

A score of more than 11 points is indicative of habitat that supports a bird assemblage of county importance.

Lowland scrub (excluding heath)	
Turtle dove	3
Cuckoo	3.5
Long-eared owl	5.5
Willow tit	5.5
Grasshopper warbler	5
Nightingale	3
Linnet	2
Lesser redpoll	5
Yellowhammer	2

A score of more than 7 points is indicative of habitat that supports a bird assemblage of county importance.