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Author: Terry Hilsden



Female Cuckoo *Cuculus canorus*

Swanscombe Peninsula Bird Ringing Report for 2022

Bird ringing has been carried out on the Swanscombe Peninsula, for the second year within the area marked out in Red in the plan below, known as Botany Marsh, after kind permission by the owners Britannia Refined Metals/Glencore, as well as Natural England as the whole of Swanscombe Peninsula was designated Site of Special Scientific Interest (SSSI) in 2021. A second Landowner has also given permission to ring within the area marked in orange. Only three ringing sessions were carried out in this area due to weather conditions and cattle grazing.



Botany Marsh Nature Reserve is approximately one eighth of the total area of the Peninsula.



The habitat of Botany Marsh is typical of the Peninsula as a whole. The land, which is managed as a nature reserve with public access, is former grazing marsh, once an extensive habitat in North Kent. The site has areas of reedbed, scrub and grassland, suitable for a variety of breeding and nesting birds.



Ringers are trained and licensed by The British Trust for Ornithology (www.bto.org) on behalf of DEFRA. Birds are trapped in mist nets and fitted with small, uniquely numbered leg rings. Biometric details (wing length, mass, fat and muscle condition, feather moult etc.) are recorded along with the age and sex of the bird before releasing it.



Very fine mist nets catch and safely hold the birds, until they are carefully removed by trained operatives.

The ringing sessions are often attended by keen ornithologists, of all ages, sharing knowledge, and learning together.

The data obtained by ringing confirms these species present

at Swanscombe Peninsula as well as those which are breeding at the site, and in time will indicate longevity of individuals and the significance of the site for overwintering resident and migrant birds.

Bird species using the area are recorded, either by trapping and ringing, or by sight/call recognition, to determine long-term trends of bird activity on the site, with a focus on species of conservation concern. The data collected reflects the results of local management and national and international influences on bird populations.

With the continued consent and kind coordination of the landowners it is intended to carry out a Constant Effort Survey in Spring/ Summer 2023 and long-term ringing at this site.

There are many advantages of trapping birds to monitor as opposed to merely observing from a distance.

A lightweight metal ring with a unique identification number is attached to the leg (as seen on this Chiffchaff *Phylloscopus collybita* caught on site in 2022) so that, if the bird is subsequently caught again or found dead, data is provided on its movement and longevity.

Marking the birds as individuals also provides a good indication of abundance on site.



Examining the bird in the hand provides data on age/sex ratios in the population that cannot be gathered in any other way.



For example the Nightingale *Luscinia megarhynchos* (above right) trapped and recorded on site in June 2022 and examined, can be identified as a female with a brood patch, thus would be raising young in a nearby nest. This data is invaluable especially on a site which is under threat of development.

The data gathered informs the BTO and their European partners about local population trends and breeding success each year. This can be compared with long-term data to monitor the status of the species. Birds caught that have been ringed elsewhere, and birds that are ringed at Swanscombe Peninsula and are caught or observed elsewhere, provide information on individual movements and behaviour. Repeat catching of resident birds provides data on site fidelity.



Male Goldcrest *Regulus regulus*

There have been 28 ringing sessions at Botany Marsh during 2022, using consistent locations. The **right hand** table below shows a total of **1449 birds of 34 species** which have been caught, ringed or processed and released. The retrap column are birds that have already been ringed before. Please see 2021 results for comparison.

2021

Species Name	New	Retrap	Total
Reed Warbler	101	9	110
Whitethroat	93	25	118
Goldfinch	77		77
Blue Tit	71	38	109
Cetti's Warbler *	69	30	99
Blackcap	73	8	81
Chiffchaff	49	3	52
Robin	34	7	41
Dunnoek	34	12	46
Blackbird	30	5	35
Greenfinch	25	3	28
Great Tit	23	12	35
Long-tailed Tit	21	27	48
Lesser Whitethroat	20	2	22
Sedge Warbler	20	1	21
Song Thrush	17		17
Wren	17	1	18
Meadow Pipit	16		16
Chaffinch	7		7
Redwing *	6		6
Willow Warbler	5		5
Bearded Tit *	4		4
Reed Bunting	4		4
Linnet	3		3
Garden Warbler	3	1	4
Bullfinch	3		3
Stonechat	2		2
Kingfisher *	2	1	3
Grasshopper Warbler	1		1
Cuckoo	1		1
Jay	1		1
Kestrel	1		1
Lesser Redpoll	1		1
Brambling *	1		1
Goldcrest	1		1
Grand Total	838	185	1021

2022

Species Name	New	Retrap	Total
Reed Warbler	136	37	173
Goldfinch	114	16	130
Blackcap	95	10	105
Blue Tit	84	117	201
Chiffchaff	77	21	98
Cetti's Warbler *	73	68	141
Common Whitethroat	58	17	75
Robin	50	30	80
Greenfinch	39	20	59
Sedge Warbler	41	5	46
Dunnoek	40	33	73
Blackbird	31	4	35
Great Tit	25	28	53
Reed Bunting	21	2	23
Long-tailed Tit	22	7	29
Song Thrush	21	7	28
Wren	16	3	19
Lesser Whitethroat	16	9	25
Chaffinch	12	1	13
Redwing *	8		8
Goldcrest	7	2	9
Willow Warbler	6		6
Moorhen	3		3
Meadow Pipit	2		2
Kingfisher *	2		2
House Sparrow	2		2
Nightingale	2		2
Linnet	2		2
Gt Spotted			
Woodpecker	1		1
Marsh Warbler *	1		1
Cuckoo	1		1
Grasshopper Warbler	1		1
Starling	1		1
Stonechat	1	1	2
Grand Total	1011	438	1449

Schedule One Listed Birds

These include four species ringed at Swanscombe Peninsula marked with * in above list:

- Marsh Warbler *Acrocephalus palustris*
- Cetti's Warbler *Cettia cetti*
- Kingfisher *Alcedo atthis*
- Redwing *Turdus iliacus*

All of which are Schedule 1 species, afforded special protection by law -

<https://www.bto.org/our-science/projects/ringing/taking-part/protected-birds>

Red Listed Birds

These are birds which are of the greatest conservation concern, where populations are declining and are listed as Red, Amber and Green to show increasing levels of concern.

Eight species of Red Listed Birds of Conservation Concern (BOCC) were ringed in 2022 at Swanscombe Peninsula:

- Cuckoo *Cuculus canorus*
- Grasshopper Warbler *Locustella naevia*
- Greenfinch *Chloris chloris*
- House Sparrow *Passer domesticus*
- Linnet *Linaria cannabina*
- Marsh Warbler *Acrocephalus palustris*
- Nightingale *Luscinia megarhynchos*
- Starling *Sturnus vulgaris*

<https://www.rspb.org.uk/globalassets/downloads/bocc5/bocc5-report.pdf>

Amber Listed Birds

Ten species of Amber Listed Birds were ringed in 2022 at Swanscombe Peninsula:

- Common Whitethroat *Curruca Communis*
- Dunnock *Prunella modularis*
- Meadow Pipit *Anthus pratensis*
- Moorhen *Gallinula chloropus*
- Redwing *Turdus iliacus*
- Reed Bunting *Emberiza schoeniclus*
- Sedge Warbler *Acrocephalus schoenobaenus*
- Song Thrush *Turdus philomenos*
- Wren *Troglodytes troglodytes*
- Willow Warbler *Phylloscopus trochilus*

The table below reveals the same species list, with adult and juvenile ages shown.

Species	Juvenile	Adult	Unaged	Total
Blue Tit	143	58		201
Blackcap	85	20		105
Reed Warbler	82	91		173
Goldfinch	76	54		130
Chiffchaff	69	22	7	98
Robin	58	20	2	80
Cetti's Warbler *	50	20	71	141
Common Whitethroat	47	28		75
Great Tit	38	15		53
Greenfinch	36	23		59
Sedge Warbler	30	16		46
Dunnock	27	37	9	73
Blackbird	24	11		35
Song Thrush	21	7		28
Wren	13	5	1	19
Reed Bunting	12	9	2	23
Goldcrest	9			9
Lesser Whitethroat	7	18		25
Chaffinch	6	7		13
Willow Warbler	6			6
Redwing*	2	6		8
Meadow Pipit	2			2
Moorhen	2	1		3
Great Spotted Woodpecker	1			1
Long-tailed Tit	1		28	29
Kingfisher*	1	1		2
Nightingale	1	1		2
Starling	1			1
Marsh Warbler*		1		1
Cuckoo		1		1
House Sparrow			2	2
Linnet		2		2
Grasshopper Warbler		1		1
Stonechat		2		2
Grand Total	850	467	132	1449

Please note that not all birds which have been trapped are ringed. This is because some we have re-trapped, that have been ringed on site before. Occasionally we trap a control, this is a bird which has been ringed elsewhere. These birds which have been previously ringed are “processed” that is - still measured, with age and sex and breeding condition determined if possible.

Controls and Recoveries

A Control is a bird which has been ringed elsewhere, and retrapped at this site. A Recovery, is a bird which has been ringed at this site, but then retrapped elsewhere.

We had no Controls this year, but it is appropriate to report again a Control from last year.

HN22543 a juvenile Reed Warbler was trapped on the 1st September 2021. This bird was confirmed as having been originally ringed on the 30th August 2021 at Stavanger Norway. This meant it had travelled a minimum of 850 km in less than 48 hours fuelled by less than 1 gram of fat. This is an astonishing feat. It is a very good indicator of the quality of the habitat, and the importance of Swanscombe Peninsula for Europe's migratory birds.



On 27th July 2022 a juvenile Reed Warbler was ringed here at Swanscombe – number ANV3566. On 11th September 46 days later, it was caught in France 491 km away at Donges, Loire-Atlantique, France, near Nantes, beginning its autumn migration to Sub Saharan Africa

Below are the results of a Common Bird Census carried out by Kent Wildlife Trust in April and June last year (2021) of the same site and within the same boundaries.

Common Name	BTO species code	Comments
Dunnock	D.	5-7 Pairs
Robin	R.	2-3 Pairs
Song thrush	ST	1-2 Pairs
Whitethroat	WH	7-9 Pairs
Lesser whitethroat	LW	3-5 Pairs
Blackcap	BC	9-14 Pairs
Chiffchaff	CC	8-12 Pairs
Long-tailed tit	LT	0-1 Pairs, single bird observed
Goldfinch	GO	4-7 Pairs
Greenfinch	GF	7-12 Pairs
Chaffinch	CH	4-8 Pairs
Blue tit	BT	7-12 Pairs
Blackbird	B.	1-2 Pairs, single birds observed on separate visits
Moorhen	MH	0-1 Pairs, single bird observed
Wren	WR	2-5 Pairs
Great tit	GT	2-3 Pairs
Reed warbler	RW	7-9 Pairs
Cuckoo	CK	0-1 Pair, individual birds observed in two visits
Cetti's warbler	CW	16 Pairs

Findings

1) In general, the ringing sessions have:

- confirmed the findings of the Common Bird Census carried out by KWT in April/June 2021
- confirmed the summary of the rationale for the application of the SSSI designation: "A regionally important breeding bird assemblage, including multiple red-listed BoCC species, further highlights the significant biological value of the Swanscombe Peninsula".

2) However, the ringing sessions have revealed that the number of reed warblers and Cetti's Warblers as well as other species estimated in previous census and surveys have been underestimated.

For example:

- KWT Survey 2021 Reed Warbler 7-9 pairs versus **91 adults processed/ringed**
- KWT Survey 2021 Cetti's Warbler 16 pairs versus **141 processed/ringed**
- KWT Survey 2021 Blackcap 9-14 pairs versus **105 processed/ringed**
- KWT Survey 19 probable breeding species versus **at least 25 breeding species**

Sedge Warblers were not observed as a breeding species, **yet 16 adults processed/ringed and 30 juveniles were ringed**.

- 3) Female Cuckoo (Red listed) was observed in vicinity of reed warblers nesting on 210622, and later caught in a net located 4 metres away. She was ringed and released. On 160722 a juvenile cuckoo was found predated in the near vicinity by sparrowhawk. Last year a juvenile cuckoo was ringed and released in same area.



4) Cetti's Warbler

This site at Swanscombe has proved to be a stronghold for this species, the marshy terrain and waterside location being an ideal habitat. - It is known as the River Nightingale in Italy (*Usignolo di fiume*) as it prefers swampy scrub, damp areas like marshes and of course has a distinctive explosive call. Its conservation status is Green – of least concern... as in Europe it is relatively common. However, it is a recent arrival in Britain, first recorded in 1961, and first breeding record in 1972 in Kent. Since then, it has colonised the UK.

Since 1985 to 2021 it has increased by 33%, but is still a Schedule 1 species. There were an estimated 3450 males in 2016. In 2021 there were 1817 ringed/processed across the UK.

At Swanscombe last year we ringed or processed 141 which equates to approximately 8% of the UK total. This underlines the superb habitat which is developing at this wonderful reserve.



5) Red-Listed Grasshopper Warbler



Caught very early one May morning, this male in breeding condition was regularly observed in his territory on the marsh. It is hoped to retrap this male this year, as well as juveniles to demonstrate the suitability of this habitat for this scarce migratory bird. The species when choosing marshland prefers rank grass, that is grassland or marsh vegetation that has grown profusely without being cut or grazed for some time, and as a result has become tall, tussocky, and dominated by coarse species of grass, - **exactly what is found across Swanscombe Peninsula.**

As this species is in “Long-term Severe Breeding Population Decline” it is vital that these habitats are left undisturbed.

6) Nightingale – another Red Listed species ringed at Swanscombe Peninsula



There are at least two breeding pairs on site. This species has been in long term moderate decline, but since 1996 has been in severe decline in the UK, is now only found in a small area of southern and eastern England during the breeding season. There are small pockets of dense scrubby woodland habitats across the Peninsula, which this species depends upon to breed. In particular this kind of habitat is being steadily degraded and lost altogether across the UK, and this is the reason thought to be behind the decline of this iconic bird.

7) Marsh Warbler

This bird was heard several times before it was trapped and ringed. It is an expert mimic, we heard it calling mixing goldfinch with reed warbler. It is Red Listed in the UK, because of recent severe breeding population decline. It is a rare passage visitor, with an average of 44 records per year in the UK, and just 14 ringed in 2021. However even more rare are records of breeding in the UK. It is suspected that it may be breeding at Swanscombe. This bird was a male in breeding condition with a Cloacal Protuberance.



The significance of the variation of marshy habitats at Swanscombe with the presence of favoured willowherb, nettles and meadowsweet often seen in re-wilded brown field sites cannot be overestimated.

Summary

- 1) **Observational surveys and census of presence of species have been confirmed.**
- 2) **Numbers of breeding Warblers have been significantly underestimated.**
- 3) **Evidence of birds thought to be breeding on site is now confirmed.**
- 4) **Breeding density is in fact greater than previously estimated, showing the mosaic of habitats support this population. Remove any part of the mosaic, the density will rapidly decrease.**
- 5) **Density of breeding Reed Warblers is such that it supports their parasitising by Cuckoos.**
- 6) **It is a nationally important breeding site for Schedule 1 Cetti's Warblers.**
- 7) **Swanscombe Peninsula is a highly suitable and vital stop off and staging post for Europe's migrating birds.**
- 8) **Four Schedule 1 species, Eight Red Listed species, Ten Amber Listed species all ringed on site.**
- 9) **Botany Marsh is just one eighth of the area of Swanscombe Peninsula. The whole site must therefore contain an even greater assemblage and density of breeding birds. More extensive ringing if permissions were given would reveal good numbers of Grasshopper Warbler, Cetti's Warbler, Whitethroat and Bearded Tit across the site.**

