



**North Selsey,
West Sussex**

Winter Bird Survey
2022/2023

For:
Landlink Estates

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FINAL

North Selsey, West Sussex 2022/23 Wintering bird survey

CONTENTS

Executive summary

1.0	Introduction	1
2.0	Desk-top research	3
3.0	Survey results	4
4.0	Assessment	11
	Introduction	11
	Geese, swans and ducks	12
	Hérons, egret and allies	14
	Gamebirds	14
	Raptors	15
	Waders	15
	Gulls	18
	Pigeons and doves	18
	Owls	19
	Woodpeckers and kingfisher	19
	Corvids	20
	Crests and tits	20
	Wren and dunnock	21
	Warblers	21
	Thrushes and starling	21
	Larks, pipits and wagtails	22
	Finches, sparrows and bunting	23
5.0	Limitations and further work	25

Appendix 1: Classification system used for BoCC4

Appendix 2: Field survey observations - data sheets

North Selsey, West Sussex 2022/23 Wintering bird survey

Executive summary

- Holbury Consultancy Service Ltd was appointed by Landlink Estates to repeat wintering bird surveys on land north of Selsey, West Sussex. The site lies between Pagham Harbour SPA and Ramsar to the east and Medmerry to the west (Figure 1). The site was previously surveyed over the winters of 2017/18, 2018/2019, 2020/21 and 2021/22.

2017/18 survey

- The 2017/18 wintering bird survey found the site had a role in supporting a nationally important population of wintering brent geese (*Branta bernicla bernicla*) and wintering populations of county importance of Eurasian wigeon (*Anas penelope*), Eurasian teal (*Anas crecca*) and lapwing (*Vanellus vanellus*).
- The site was considered to have a role in supporting wintering populations of district importance for eight species: mallard (*Anas platyrhynchos*), little egret (*Egretta garzetta*), peregrine (*Falco peregrinus*), curlew (*Numenius arquata*), golden plover (*Pluvialis apricaria*), green sandpiper (*Tringa ochropus*), stock dove (*Columba oenas*) and skylark (*Alauda arvensis*).

2018/19 survey

- The findings of the 2018/19 wintering bird surveys largely confirmed those of the previous year. As for the 2017/18 survey, the site was considered to have a role in supporting a nationally important population of wintering brent geese and wintering populations of county importance of Eurasian teal (*Anas crecca*) and lapwing.
- Again, as before, the site was also considered to have a role in supporting wintering populations of district importance for eight species: mallard, little egret, peregrine, curlew, golden plover, green sandpiper, stock dove and skylark. No Eurasian wigeon were recorded feeding on site during the 2018/19 winter.

2020/21 survey

- The findings of the 2020/21 wintering bird surveys largely confirmed those of the previous year. As noted during previous surveys the site is considered to have a role in supporting a nationally important population of wintering brent geese.

- The site was also considered to have a role in supporting wintering populations of district importance for twelve species: mallard, little egret, peregrine, oystercatcher (*Haematopus ostralegus*), curlew, lapwing, golden plover, green sandpiper, stock dove, meadow pipit (*Anthus pratensis*), skylark and pied wagtail (*Motacilla alba yarrellii*).

2021/22 survey

- The findings of the 2021/22 wintering bird surveys largely confirmed those of the previous year. However, in contrast to previous years brent geese were only recorded feeding on site on two survey visits. Eurasian teal were recorded on the site in numbers considered to be of county importance, with the western flight pond regularly holding good numbers.
- The site was also considered to have a role in supporting wintering populations of district importance for seven species: mallard, peregrine, oystercatcher, curlew, golden plover, stock dove, skylark and yellowhammer.

2022/23 survey

- Two transect surveys a month were undertaken between October 2022 and March 2023. The wintering bird survey used a methodology adapted from the BTO Winter Farmland Bird Survey. The survey visits were timed to coincide with high tide to ensure the site was surveyed when birds present in Pagham Harbour and Medmerry were most likely to be using surrounding habitats.
- During the twelve field surveys, a total of 90 species were recorded. Of these, 13 are red list species, 32 are amber list species and the remaining 45 species are included on the green list.
- As in 2021/22 use of the site by brent geese was more irregular than in previous winters, despite fields where use has been recorded in previous surveys being sown with winter cereals. Significant numbers were only recorded on two survey visits with the majority of the Pagham Harbour population seeming to favour fields north of the harbour or around Medmerry during the winter period. Patterns of use of the site over the last two years may be indicative of changing patterns of site use by feeding brent geese.
- The supplementary feeding of the western flight pond continues to attract Eurasian teal from the surrounding area. Once again, the site was found to have a role in supporting a population of county importance.
- The fields around Park Farm and associated surface water flooding proved

attractive to both oystercatcher and curlew over the high-water period throughout the winter. Disturbance by walkers and dogs using the rights of way caused birds to move between fields but it is clear that these fields had a role in supporting populations of county importance of both species during the 2022/23 winter period. The results of 2022/23 contrast with the previous winter when very few oystercatcher were recorded anywhere on the site and curlew were only occasionally recorded using the fields around Park Farm.

- The site was also considered to have a role in supporting wintering populations of district importance for a further thirteen species: mallard, peregrine, marsh harrier, lapwing, golden plover, common snipe, green sandpiper, stock dove, raven, skylark, pied wagtail, linnet and yellowhammer.
- Over the five years of surveys marsh harrier have become established as a regular wintering species in the local area. The survey findings show birds being recorded more regularly, both flying over the site and also hunting along ditches and rifes. Surface water flooding over the winter on Ferry Gate Field proved attractive to common snipe over the winter with birds regularly recorded from this area. This is the first year when common snipe has been consistently recorded from a specific field over a number of survey visits.
- Patterns of use of the site by golden plover and lapwing were largely similar to those recorded in previous years with flocks roosting on the larger open fields. The higher number of wintering passerines of district importance noted over the 2022/23 season is probably a reflection of the good quality foraging habitat present in fields where the salad and herb beds were left over the winter. A small strip of cover crop along the edge of the public footpath crossing Park Farm also attracted passerines.
- The findings of the 2022/23 wintering bird surveys largely confirm those of previous years. Notable changes in the size of wintering populations of some species were recorded. However, the distribution of key wader, geese and duck species across the site largely mirrored patterns observed in previous surveys.
- A local and active ornithological group closely monitors Selsey and the surrounding area. It is recommended that this group be contacted to request access to records for the site, to ensure a comprehensive identification of key areas for foraging and roosting birds.

North Selsey, West Sussex 2022/23 Wintering bird survey

1.0 Introduction

- 1.1 Holbury Consultancy Service Ltd was appointed by Landlink Estates to repeat wintering bird surveys on land north of Selsey, West Sussex (Figure 1). The site had previously been surveyed over the winters of 2017/18, 2018/19, 2020/21 and 2021/22. The area covered by the survey is predominately arable land used for salad, vegetable, and cereal crops. Associated with the salad production are a series of irrigation reservoirs. A small shoot is active across the site and the flight ponds are fed over the winter period. Semi-natural habitat is extremely limited.
- 1.2 A series of transect surveys were undertaken, twice a month, between October 2022 and March 2023. The wintering bird survey used a methodology adapted from the BTO Winter Farmland Bird Survey¹. Visits were timed to coincide with high tide, generally starting around two and a half hours before high water and concluding around two and a half hours after high water. A transect covering all fields within the site was walked and all bird activity observed recorded. The starting point, route and the direction the transect was walked were changed each time to ensure each part of the site was surveyed at different points of the tidal cycle. During December and January, the survey covered late afternoon periods when crepuscular species such as barn owl (*Tyto alba*) could be active.
- 1.3 The survey visits were timed to coincide with high tide. Undertaking survey work over high tide periods ensures that the site was visited when birds present in Pagham Harbour and Medmerry were most likely to be using surrounding habitats.
- 1.4 The previous surveys had recorded several different species using fields on site for feeding and roosting, including brent geese (*Branta bernicla bernicla*), curlew (*Numenius arquata*), golden plover (*Pluvialis apricaria*) and lapwing (*Vanellus vanellus*).

¹ Gillings, S., Wilson, A.M., Conway, G.J., Vickery, J.A., Fuller, R.J., Beavan, P., Newson, S.E., Noble, D.G and Toms, M.P. (2008) Winter Farmland Bird Survey. BTO Research Report No 494. BTO. Thetford, Norfolk.

- 1.5 The objective of the survey work was to record the wintering population of birds on site and evaluate their distribution with reference to previous survey results. The survey specifically focussed on ducks, geese and waders, although a record was made of all species seen.
- 1.6 Jeff Picksley MCIEEM conducted the survey work on behalf of Holbury Consultancy Services Ltd. Incidental observations made during other surveys have been used to supplement the bird survey results.

2.0 Desk-top research

2.1 Recent Sussex Bird Reports^{2,3} were used to establish population levels and abundance of wintering species in Sussex. This allows for an assessment to be made of the significance of the species recorded at a county level. Table 1 below shows the numerical ranges used in the bird reports to describe the status of species in Sussex.

Table 1: Population classification used in Sussex Bird Report.

	Winter/passage
Very rare	1 - 10 records in total
Rare	Less than annual
Very scarce	1 - 20 per year
Scarce	21 - 200
Fairly common	201 - 2,000
Common	2,001 - 10,000
Very common	10,001 - 60,000
Abundant	60,000+

- 2.2 In addition WEBS data⁴ collected for Pagham Harbour and Medmerry was reviewed to determine the populations of birds using the protected sites. There is likely to be a degree of interchange between the two sites and the development of Medmerry is likely to have resulted in a redistribution of wintering birds within the local area.
- 2.3 Nationally breeding and wintering bird populations in the UK are subject to periodic review to identify species of conservation concern⁵. The review subdivides populations into three categories: red list species are those of highest conservation concern, amber list species are species experiencing moderate declines in populations or range and those on the green list are of no immediate conservation concern. The most recent review was undertaken in 2021 (Birds of Conservation Concern 5). Appendix 1 gives further details of the assessment criteria used in the compilation of these lists.

² Sussex Ornithological Society (2019) The Sussex Bird Report 2018. No 71.

³ Sussex Ornithological Society (2020) The Sussex Bird Report 2019. No 72.

⁴ Frost, T.M., Calbrade N.A., Birtles, G.A, Hall, C., Robinson, A.E, H.J., Wotton, S.R., Balmer, D.E. and Austin, G.E 2021 Waterbirds in the UK 2019/20: The Wetland Bird Survey. BTO/RSPB/JNCC. Thetford. <https://app.bto.org/webs-reporting/numbers.jsp>

⁵ Stanbury, A., Eaton, M., Aebischer., Balmer, B., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D and Win, I (2021). The status of our bird populations: the fifth *Birds of Conservation Concern in the UK, Channel Islands and Isle of Man* and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds*. (114), pp. 723-747.

3.0 Survey results

3.1 Table 2 shows the dates, duration and weather conditions during the twelve survey visits. The table also includes the high tide time for Pagham Harbour. The survey visits were timed to coincide with the high-water period as it was considered this was the period when birds using Pagham Harbour and Medmerry were most likely to be displaced onto neighbouring farmland.

Table 2 Survey timings, tide times & weather conditions during surveys

Date	Time	Weather
10/10/22	10:05 - 15:10	Overcast at start of survey, bright sunshine by end. Mild. Cloud cover 8/8 at start 0/8 by finish. North-west wind BF4. High tide (Pagham Harbour): 12:32 (5.89m)
26/10/22	09:55 - 15:15	Sunny intervals at start changing to bright sunshine as survey progressed. Very mild. Cloud cover 5/8 at start reducing to 1/8 by finish. South-west wind BF4-5 dropping to BF3-4. High tide (Pagham Harbour): 12:28 (5.51m)
08/11/22	08:45 - 14:40	Overcast at start of survey becoming sunny with showers as survey progressed. Mild. Cloud cover 7/8 at start decreasing to 3/8 by end. South-west wind BF5-6. High tide (Pagham Harbour): 11:03 (5.71m)
25/11/22	09:10 - 15:20	Bright sunshine throughout and very mild. Cloud 0/8. South-west wind BF3-4 dropping to BF1-2 by finish. High tide (Pagham Harbour): 11:45 (5.75m)
07/12/22	08:00 - 14:00	Cold with fair weather cloud at start becoming increasingly sunny. Grass frost at start. Cloud cover 5/8 at start decreasing to 1/8 by finish. Wind north BF1 increasing to BF2-3. High tide (Pagham Harbour): 10:35 (5.41m)
23/12/22	08:10 - 14:40	Overcast with light rain until 09:30, then becoming sunny and mild. Cloud cover 8/8 at start decreasing to 2/8 by end of survey. Wind south-west BF3-5. High tide (Pagham Harbour): 10:41 (5.63m)
06/01/23	08:30 - 14:10	Sunny at start becoming overcast with light rain from 12:50 onwards. Cloud cover 1/8 at start increasing to 8/8 by end of survey. Wind south-west BF1-3. High tide (Pagham Harbour): 10:53 (5.15m)
24/01/23	10:30 - 15:40	Overcast, cloud cover 7/8 to 8/8 throughout survey. Cold at start but becoming milder during survey. Western flight pond remained frozen all day. Wind north-east BF2-3. High tide (Pagham Harbour): 13:08 (5.74m)
08/02/23	10:10 - 15:25	Bright and sunny throughout following overnight frost. Cloud 0/8. Wind east backing south BF1-2. High tide (Pagham Harbour): 12:49 (5.21m)
22/02/23	10:30 - 15:40	Overcast with spells of light rain. Mild. Cloud cover 7/8 to 8/8 throughout survey. Wind south-west BF2-3 backing north-west BF1-2. High tide (Pagham Harbour): 12:55 (5.85m)

10/03/23	10:30 - 15:20	Overcast with sunny spells. Cloud cover 6/8 at start increasing to 8/8 by end of survey. Wind north-west BF4-5 dropping to BF2-3. High tide (Pagham Harbour): 12:56 (5.35m)
22/03/23	09:25 - 14:50	Overcast throughout survey with light rain at start. Mild. Cloud cover 8/8 throughout. Wind south-west BF5. High tide (Pagham Harbour): 11:50 (5.81m)

- 3.2 Access to the fields was unconstrained during the survey, although the reservoirs are fenced and access was not possible. The survey area is a working farm and some agricultural activity occurred during the surveys. The site is subject to a degree of public access from the neighbouring areas, mainly walkers and dog walkers. Public access was not restricted to public rights of way and dogs were frequently recorded roaming across fields.
- 3.3 Bird scaring measures were in place in on fields sown with winter cereals, these included the use of gas guns and strings spread across fields to deter feeding geese.
- 3.4 During the twelve visits a total of 90 species were recorded during the field surveys. Of the 90 species recorded during the wintering bird survey at Selsey, 13 are red list species, 32 are amber list species and the remaining 45 species are included on the green list.
- 3.5 The number of species recorded in each visit varied between 48 recorded in late November and 66 during early December. The mean number of species recorded per visit was 58. Appendix 2 includes tables detailing the results of each survey.
- 3.6 Forty nine species were recorded during nine or more survey visits (54% of the total species recorded). These species represent the core wintering bird community within the survey area. Table 3 lists the species recorded on 75% of survey visits or more. Species names are coloured appropriately for those species that occur on the red or amber list (BoCC5). Thirty-two of these species (65%) were also recorded on at least 75% of visits during the other four winter survey periods (2017/18, 2018/19, 2020/21 and 2021/22). A further six of the species were recorded on at least 75% of survey visits during four of the five winter surveys periods.

Table 3 List of species recorded on nine or more survey visits

Species					
Eurasian teal	Mallard	Red-legged partridge	Common pheasant	Common buzzard	Kestrel
Sparrowhawk	Curlew	Oystercatcher	Golden plover	Lapwing	Common snipe
Cormorant	Black-headed gull	Herring gull	Mediterranean gull	Great black-backed gull	Moorhen
Coot	Jackdaw	Carrion crow	Magpie	Jay	Rook
Green woodpecker	Blue tit	Great tit	Skylark	Meadow pipit	Stock dove
Woodpigeon	Feral pigeon	Blackbird	Song thrush	Common starling	Dunnock
Wren	Robin	Pied wagtail	Grey wagtail	Stonechat	Goldcrest
Cetti's warbler	Long-tailed tit	Goldfinch	Greenfinch	Chaffinch	Linnet
House sparrow					

3.7 Of the regularly recorded species, eight are red list species and seventeen feature on the amber list. The duck species recorded were largely associated with the flight ponds, irrigation reservoirs and ditches. The gull species were present flying over the site or feeding and loafing on fields. Lapwing and golden plover were recorded feeding and roosting on arable fields within the site; flocks of both species were also recorded flying over. Curlew and oystercatcher (*Haematopus ostralegus*) were recorded foraging on fields over the high tide period. Common snipe (*Gallinago gallinago*) were recorded along the ditches or on fields with surface water flooding, notably Ferry Gate Field.

3.8 Seventeen species were recorded on two or fewer survey visits only (19% of the total species recorded). These species are a mix of migrants, birds flying over the site, occasional visitors or those wintering on site in very low numbers. All seventeen species have been recorded on site during at least one previous winter survey period. Table 4 lists those species recorded on two or fewer survey visits.

Table 4 List of species recorded on two or fewer survey visits

Species					
Canada goose	Pintail	Tufted duck	Peregrine	Water rail	Black-tailed godwit
Grey plover	Jack snipe	Barn owl	Short-eared owl	Kingfisher	Barn swallow
House martin	Dartford warbler	Firecrest	Rock pipit	Siskin	

- 3.9 Of the species recorded on two or fewer occasions two are red list species and three are included on the amber list. Little grebe (*Tachybaptus ruficollis*), jack snipe (*Lymnocyptes minimus*) and short-eared owl (*Asio flammeus*) were all recorded on site for a second winter period following first records in 2017/18 of jack snipe and 2021/22 for little grebe and short-eared owl. No new species were recorded using the site during 2022/23. Since October 2017 a total of 116 species have been recorded during the surveys.
- 3.10 The remaining twenty-four species were recorded on between three and eight of the survey visits. This includes four red list species and eleven species included on the amber list. These species include raptors such as marsh harrier (*Circus aeruginosus*) which wintered in the Pagham Harbour/Medmerry area and species regularly using the site for foraging including little egret (*Egretta garzetta*), shoveler (*Anas clypeata*) and mute swan (*Cygnus olor*). It also encompasses a large number of species wintering within the survey area at low densities such as little grebe, green sandpiper (*Tringa ochropus*), common redshank (*Tringa totanus*), yellowhammer (*Emberiza citronella*), reed bunting (*Emberiza schoeniclus*), grey heron (*Ardea cinerea*) and great spotted woodpecker (*Dendrocopos major*), or those present on site sporadically such as brent goose, ringed plover (*Charadrius hiaticula*), dunlin (*Calidris alpina*), common shelduck (*Tadorna tadorna*), gadwall (*Mareca strepera*), raven (*Corvus corax*), fieldfare (*Turdus pilaris*) and redwing (*Turdus iliacus*).
- 3.11 Five species have only been recorded in the 2017/18 survey period: spoonbill (*Platalea leucorodia*), ruff (*Calidris pugnax*), spotted redshank (*Tringa erythropus*), yellow-browed warbler (*Phylloscopus inornatus*) and bullfinch (*Pyrrhula pyrrhula*). One species has only been recorded in the 2018/19 survey period: avocet (*Recurvirostra avosetta*).

- 3.12 Eurasian white-fronted goose (*Anser albifrons albifrons*), barnacle goose (*Branta leucopsis*), cattle egret (*Bubulcus ibis*), little ringed plover (*Charadrius dubius*), sand martin (*Riparia riparia*), blackcap (*Sylvia atricapilla*) and Richard's pipit (*Anthus richardi*) have only been recorded on site during the 2020/21 survey period.
- 3.13 Seven species have only been recorded during the 2021/22 survey period: garganey (*Anas querquedula*), knot (*Calidris canutus*), greenshank (*Tringa nebularia*), little owl (*Athene noctua*), ring ouzel (*Turdus torquatus*), yellow wagtail (*Montacilla flava*) and brambling (*Fringilla montifringilla*).
- 3.14 Table 5 on the following page shows the twenty most numerous species recorded during the surveys ranked by the total number of birds recorded over all twelve visits. Woodpigeon (*Columba palumbus*) were the most numerous, with large numbers recorded on every survey visit. Golden plover and lapwing were frequently recorded flying over the site or roosting and feeding on fields. Skylark (*Alauda arvensis*) were present in good numbers with an average count of 90 birds over the twelve visits. Common starling (*Sturnus vulgaris*) were also abundant, a reflection of the large wintering populations in the area. Stock dove (*Columba oenas*) were present in reasonable numbers throughout the winter, with a resident flock centred on the western flight pond.
- 3.15 Very few brent geese were recorded feeding on site this winter with most records relating to flocks moving between Medmerry and Pagham Harbour. A flock of 907 birds was recorded feeding on winter cereals in late November with 273 birds recorded feeding on site in early December. These were the only two significant feeding flocks noted during the surveys. Eurasian teal (*Anas crecca*) numbers were generally similar to those recorded in 2021/22, however a lack of peak counts over 100 birds in 2022/23 compared to the previous winter meant the overall total number recorded was around 65% lower than the previous winter; this may be a reflection of the mild winter.

Table 5 Twenty most numerous species recorded at Selsey during wintering bird surveys

Species	No of surveys recorded	Peak count	Date peak count	Total number recorded
Woodpigeon*	12	580	22/02/23	4234
Golden plover*	10	609	10/03/23	2339
Lapwing*	10	311	08/11/22	1761
Brent goose*	6	918	25/11/22	1713
Black-headed gull*	12	212	06/01/23	1612
Common starling*	12	594	10/10/22	1190
Skylark*	12	134	06/01/23	1079
Meadow pipit*	12	168	22/02/23	927
Stock dove*	12	134	08/02/23	779
Rook	12	97	22/02/23	590
Curlew*	10	123	08/11/22	576
Herring gull*	12	111	06/01/23	479
Jackdaw	12	201	24/01/23	475
Carrion crow*	12	85	10/10/22	472
Pied wagtail	12	76	07/12/22	461
Eurasian teal	10	78	08/02/22	362
Goldfinch	12	54	26/10/22	345
Linnet*	12	206	10/10/22	332
Mallard	12	46	06/01/23	313
Magpie*	12	30	06/01/23 & 22/02/23	266

* Species that have occurred in the twenty most numerous species recorded on site in each of the five wintering bird surveys

- 3.16 Table 5 shows that 30% of the most numerous wintering species are those associated with wintering populations in Pagham Harbour and Medmerry (brent goose, Eurasian teal, mallard (*Anas platyrhynchos*), lapwing, golden plover and curlew). The results of the survey suggest brent geese fed less on the site (despite many fields being sown with winter cereals) than in previous years. For example, in 2020/21 flocks of brent geese more than 1000 birds were recorded on four visits, but flocks of this size were not present during the 2022/23 winter.
- 3.17 Eurasian teal were recorded mainly on the western flight pond, although overall numbers were lower than in some previous survey years due to a lack of exceptional counts (100 plus birds). The supplementary feeding of the flight ponds also attracted mallard and stock dove. Stock dove numbers were also lower than those recorded in previous winters.

- 3.18 As in all previous survey seasons woodpigeon were numerous over the winter with large flocks recorded widely across the site. These flocks were very mobile and some double counting may have occurred. Herring gull (*Larus argentatus*) records and black-headed gull (*Chroicocephalus ridibundus*) records relate mainly to birds flying across the site or birds loafing on Pole Field. Three sizable flocks of black-headed gull (over 100 birds) were noted feeding on site over the winter.
- 3.19 The wintering populations of meadow pipit (*Anthus pratensis*) was probably in the region of 60-80 birds and the wintering skylark population was estimated to be around 80-100 birds. As in the winter of 2020/21 the site supported good numbers of pied wagtail with the wintering population estimated to be around 40-60 birds.
- 3.20 Common starling, rook (*Corvus frugilegus*) and jackdaw (*Corvus monedula*) records relate to either large flocks flying over the site or small flocks foraging on site.
- 3.21 Over the five winter seasons surveyed there have been only minor changes in the composition of the twenty most numerous species recorded across the site. Fourteen species have occurred in the twenty most numerous species recorded during in each winter period. These species are marked with an asterisk in table 5. It is highly likely that, had shooting not been suspended during the winter of 2020/21 and feeding of the flight ponds had occurred as normal, Eurasian teal would also feature on the list. Red-legged partridge (*Alectoris rufa*) numbers were very low in 2022/23 due to the absence of released birds.

4.0 Assessment

Introduction

- 4.1 This assessment considers the significance of the birds recorded at Selsey. To provide context, the wintering bird populations on site are considered against the wider wintering populations within the county. The main data sources used for this are Sussex Bird Reports and WEBS data for Pagham Harbour and Medmerry. The assessment focuses mainly on those species of conservation concern (red and amber list species) recorded during the survey. Records of scarce wintering species within the county are also considered, even if the species concerned is not of wider conservation concern. The definition of scarce is taken from the criteria used in the Sussex Bird Report as set out in Table 1. The field names used in the assessment are shown in Figure 2.
- 4.2 The size of the county wintering population for each species is taken from the Sussex bird Report. Where species are resident with numbers augmented by winter visitors the resident population size has been used as the baseline for assessment. As the size of the wintering population will vary each year depending on factors such as severity of winter, this precautionary approach will tend to underestimate the size of the overall wintering population.
- 4.3 The importance of the wintering bird populations has been assessed at five levels: national, regional, county, district and local. A nationally important population relates to a significant proportion of the SPA population occurring on site. A regionally important population will contain a significant proportion of the wintering population of birds within the counties of Hampshire, Sussex and Kent. A population of county importance will support a significant proportion of the wintering population of a species within Sussex, or notable populations of species of conservation concern. Populations of district importance are those considered to be significant in a localised area (in this case the local authority area) and local populations are significant at a parish level.
- 4.4 The distribution maps only show birds recorded feeding or roosting on site. Records of birds flying over the site have not been included on these maps but are shown on the field maps.

Geese, swans, ducks and grebes

- 4.5 Brent geese were recorded feeding on site on five occasions (see Figure 3). The most significant counts were of 907 birds feeding on Church Norton West (25/11/22) and 273 birds feeding on 19 Acres (07/12/22). Birds were also recorded feeding on site on Church Norton East (20 birds 08/11/22), 19 Acres (2 birds 25/11/22), Pole Field (11 birds 23/12/22) and Drift Road (a single bird 08/02/23). All other records relate to birds flying across the site between Pagham Harbour and Medmerry. The peak count of brent geese using the site represents c31% of the current wintering flock within Pagham Harbour (5 yr average 2889 birds (2015/16 to 2019/20)). As shown during previous surveys the site has a role in supporting a nationally important wintering brent goose population, but site use varies considerably year-to-year, probably in response to cropping cycles. Brent geese tend to favour fields sown with winter cereals on this site.
- 4.6 A flock of 39 Canada geese (*Branta canadensis*) flew over Ferry 2 in November. This record is not considered to be of any conservation significance.
- 4.7 A pair of mute swan were present on site from early January onwards, with birds recorded feeding on Granery and Bartlets during this period. A juvenile bird was noted on Strawberry reservoir in October. Common shelduck were recorded on site from early February onwards around the western flight pond and Compton's irrigation reservoirs. A peak count of 14 birds was made in early February.
- 4.8 Shoveler were recorded on five visits with birds most often recorded Hogs Marsh and Compton's irrigation reservoirs (maximum count 2 birds). A count of 30 birds on Strawberry reservoir during cold weather in January was presumably as a result of birds being displaced from other frozen waterbodies.
- 4.9 Pintail (*Anas acuta*) were recorded flying over the site on two occasions (10/10/22 and 26/10/22), but no birds were recorded using the site during the surveys. Gadwall were recorded using the western flight pond on three survey visits. Five birds were recorded there in early February, but other counts were of single birds. A pair were noted on Hogs Marsh reservoirs during the final March survey.
- 4.10 A single tufted duck (*Aythya fuligula*) was noted on Hogs Marsh reservoirs in early December. It is likely birds were present on the irrigation reservoirs throughout the winter period.

- 4.11 None of the species discussed in paragraphs 4.6 to 4.10 occurred on site in any significant numbers and the site is of local importance only for these species.
- 4.13 Eurasian teal were regularly recorded on site in variable numbers throughout the winter (see figure 4). Numbers peaked 8 February when 78 birds were present on the western flight pond. Apart from a pair on Hogs Marsh reservoir, all records of settled Eurasian teal were of birds on the western flight pond.
- 4.14 As in previous winters (2020/21 being the exception) the supplementary feeding of the western flight pond attracted Eurasian teal over the winter period. Numbers varied throughout the survey period (with low counts likely to be a result of disturbance of the birds before the pond was surveyed). Typical counts ranged from between 10 and 78 birds. In contrast to previous surveys no Eurasian teal were recorded using the eastern flight pond. No other significant concentrations of Eurasian teal were recorded on site over the winter.
- 4.15 The peak Eurasian teal count represented about 11% of the current Pagham Harbour wintering population (5 yr average 697 birds (2015/16 to 2019/20)); counts over the winter period suggest numbers around the flight ponds fluctuate between 1% and 11% of the Pagham Harbour population. Monitoring over the winter of 2020/21 demonstrated the role the supplementary feeding has in attracting Eurasian teal to the flight ponds. The site is considered to have a role in supporting a wintering Eurasian teal population of county importance when supplementary feeding is provided and of local importance when ponds are not fed.
- 4.16 Variable numbers of mallard were recorded during the survey with a maximum count of 46 birds (6 January). Birds congregated in the largest numbers on the western flight pond, with smaller numbers attracted to areas of surface water flooding on fields and, later in the winter, the ditches and rifes (see figure 5). The peak count represents around 27% of the wintering population within Pagham Harbour, although for 8 of the 12 survey visits 30 or fewer birds were recorded. The site is considered to have a role in supporting a wintering mallard population of district importance.
- 4.17 A little grebe was recorded on Hogs Marsh reservoir in December and January and on the western flight pond 22/02/23. It is thought these records relate to the same individual. This is the second time this

species has been recorded on the site during the winter period. This record is not considered to be of any conservation significance.

Herons, egret and allies

- 4.18 Little egret was only consistently recorded feeding along ditches surrounding Pangham Marsh and Woolhouse Marsh within the survey area (see figure 6). A peak count of 5 birds was made in late October. Birds were also recorded flying across the site on two separate occasions.
- 4.19 Grey heron were recorded feeding in ditches around Pangham Marsh and Woolhouse Marsh and the eastern flight pond, the numbers recorded varied between 0 and 3 birds per visit. The site provides supporting habitat for wintering little egret and grey heron populations that are considered to be of local importance.
- 4.20 Coot (*Fulica atra*) were recorded on Hogs Marsh reservoirs, Strawberry reservoir, the western flight ponds and Compton's irrigation reservoirs throughout the survey period. Eight birds were present on the banks of Compton's irrigation reservoirs in late January. Moorhen (*Gallinula chloropus*) were recorded in ditches and on other waterbodies across the site. The highest numbers were noted on the western flight pond with between five and eight birds regularly recorded here. The wintering population of moorhen is estimated to be in the region of fifteen birds. A water rail (*Rallus aquaticus*) was recorded in a frozen ditch on the southern edge of Long Slip in late January. This bird may have been displaced from more suitable habitat in the local area. These records are not considered to be of any conservation significance.

Gamebirds

- 4.21 Small numbers of both red-legged partridge and common pheasant (*Phasianus colchicus*) are present on site. It did not appear that birds had been released on site this year and covey sizes of red-legged partridge were very small compared to previous years. The populations of pheasant and red-legged partridge are of no conservation significance.

Raptors

- 4.22 Kestrel (*Falco tinnunculus*), sparrowhawk (*Accipiter nisus*) and common buzzard (*Buteo buteo*) were all regularly recorded during the survey hunting across the site. The site is of local importance for these species.
- 4.23 Peregrine (*Falco peregrinus*) were recorded on two occasions: once in October and once in December. The bird seen in October was an immature bird. It was not possible to determine the age of the bird seen in December. Peregrine were present around Pagham Harbour throughout the survey period. The site would appear to form part of the home range of a least one wintering bird and has a role in supporting a population of district importance.
- 4.24 At least two different marsh harrier were recorded during the survey period. A juvenile bird was noted hunting along the rife bordering the western side of 15 Acres on two occasions. A female bird was noted Kennets heading towards Pagham Harbour in early December with it, or another female recorded circling Ferry Gate Field in early February before heading towards Medmerry. Marsh harrier were present in the Pagham Harbour/Medmerry area throughout the winter period. Marsh harrier were recorded hunting within the survey area and, given the presence of an established wintering population in the wider area it would appear the site forms part of the winter range of these birds and has a role in supporting a population of district importance.

Waders

- 4.25 Oystercatcher were recorded during eleven surveys (see figure 7). As in the 2020/21 survey birds were making regular use of the fields around Park Farm. Birds were most frequently recorded using Long Slip but moved around a number of fields with birds noted on Pole Field, Copse Field and Horse Pond. A peak count of 27 birds was made in early January, with totals of between 5 and 20 bird typical of most surveys. The peak count of oystercatcher recorded represents around 12% of the wintering population of Pagham Harbour. The site is considered to have a role in providing feeding and foraging habitat over the high tide period for a wintering oystercatcher population of county importance.
- 4.26 Curlew were recorded feeding on site through the survey period in variable numbers (see figure 8). Peak counts were 101 on Park Field 06/01/23, 68 birds on Pole Field 08/11/22, 52 Long Slip 8/11/22, 30 on Church Norton East 22/03/23 and 18 birds on Woolhouse Marsh

22/03/23. Over the survey period birds were recorded on Long Slip six times, Copse Field and Pole Field five times, Park Field three times, twice on Ferry 2 and Church Norton East and once on Woolhouse Marsh and Pangham Marsh 2.

- 4.27 The peak count of 123 curlew during the survey period represents approximately 36% of the wintering population in Pagham Harbour (5 yr average 337 birds (2015/16 to 2019/20)). The survey demonstrated that the arable fields around the harbour provide foraging and roosting opportunities for curlew over the high tide period. The site has a role in supporting a wintering population of county importance.
- 4.28 Lapwing flocks on site of 100 birds or more were recorded on four occasions (see figure 9). A count of 184 birds on Kennets was the highest of the winter period (08/11/22) with 156 birds on Home Farm 23/12/22 the next highest count. The other counts in excess of 100 birds were from Ferry 2: 126 birds (8/11/22) and 107 birds on Comptons (24/01/23). Sixty nine birds were recorded on Norton Corner 24/01/23; these were assumed to be the same flock recorded later in the survey on Palmers. Flocks of birds were also recorded flying across the site throughout the survey period.
- 4.29 The survey findings indicate lapwing are attracted to larger fields adjacent to Pagham Harbour for roosting. The peak count of the winter period represents approximately 12% of the wintering population in Pagham Harbour (5 yr average 2514 birds (2015/16 to 2019/20)). The site is considered to have a role in supporting a wintering lapwing population of district importance but is probably not core foraging habitat.
- 4.30 Golden plover were recorded using four fields on site during the survey period. Flocks of 146 (the largest flock recorded during the surveys (22/03/23)) and 26 birds (24/01/23) were recorded on Norton Corner. Flocks of 142 and 128 birds were recorded on Kennets (8/11/22 and 10/03/23 respectively), along with 5 birds on 10/03/23 . A flock of 67 birds was recorded on Home Farm (23/12/22) and 18 were recorded on Ferry 2 on 8/11/22 (see figure 10). Flocks of up to five hundred birds were recorded flying across the site during the survey period.
- 4.31 The survey findings show that golden plover were sporadically using the site throughout the winter, mainly for roosting. This species appears to favour the largest fields within the site for roosting. The site provides foraging and roosting opportunities for the Pagham Harbour population depending on the site conditions. Large flocks were regularly recorded

flying over the site between Pagham Harbour and Medmerry which resulted in high numbers being recorded. It should be noted that as golden plover are not strongly associated with inter-tidal habitats and the WEBS counts often under-record populations. The current 5-year average peak count for golden plover in Pagham Harbour is only 384 birds. The numbers recorded during surveys indicate that this figure is a substantial under-estimation of the population wintering in the Pagham/Medmerry area. The site is considered to have a role in supporting a wintering golden plover population of district importance but is probably not core foraging habitat.

- 4.32 Grey plover (*Pluvialis squatarola*) were recorded feeding on site on one occasion. The findings of the survey are in line with previous surveys which have shown this species, which is primarily associated with intertidal habitats, very occasionally makes use fields close to the harbour over high water.
- 4.33 Ringed plover were recorded on site during three surveys. Three birds were recorded feeding on Drift Road on 23/12/22 and 10/03/23. Four birds were recorded on Kennets on 22/03/23. These findings are in line with previous surveys which have recorded occasional use of the fields by ringed plover over high tide periods or during spells of cold weather.
- 4.34 As in previous winters common snipe were occasionally flushed from fields and ditches across the site (see figure 11) throughout the survey period. The peak count of 32 birds occurred in late January and included 11 birds flying over the site. Ferry Gate Field regularly held birds between 23/12/22 and 10/03/23 with a peak count of 13 birds (count range 2-15). Common snipe were more abundant on site during this survey period than in previous winters.
- 4.35 The survey results suggest that the site supports low numbers of common snipe over the winter period and that the wintering population during 2022/23 was possibly of district importance.
- 4.36 Common redshank were recorded feeding on site on seven occasions. One or two birds were regularly recorded in flooded areas on Copse Field and Pole Field. In late March four birds were around Pangham Marsh and Pangham Marsh 2. Green sandpiper were regularly recorded around Compton's irrigation reservoirs and Hog's Marsh reservoirs with a maximum count of 3 birds.
- 4.37 The site supported 2-3 green sandpiper over the winter period, it is thought birds were using the irrigation reservoirs as well as the fields for

feeding and roosting. The wintering population of green sandpiper is of district importance. The site does not appear to be of any significant value to wintering common redshank

- 4.38 Dunlin were recorded flying over the site on two occasions (birds mixed with golden plover) and recorded feeding on site on two occasions: on Copse Field (7 birds) and Drift Road (a single bird). A jack snipe was flushed from Ferry Gate Field in early December. Two black-tailed godwit (*Limosa limosa*) flew over Ferry Gate Field on 22/02/23. The site is not considered to be of any significant value to these species.

Gulls

- 4.39 Relatively low numbers of gulls were recorded within the survey area, with only peak counts of black-headed gull and herring gull exceeding 100 birds. Counts of over 100 black-headed gulls were made during five surveys (maximum count 242 birds 10/10/22 and 145 birds on Ferry Barn 22/02/23). The next most numerous species on site was herring gull with peak counts between 13 and 111 birds. Mediterranean gull (*Larus melanocephalus*) numbers fluctuated throughout the survey period with peak counts of 53 and 44 birds but seven survey days with maximum counts of 10 birds or fewer. Great black-backed gull (*Larus marinus*) were regularly recorded flying over the site or roosting on arable fields (maximum count 29 birds).
- 4.40 The black-headed gull activity mainly consisted of birds feeding or loafing on the arable fields (e.g. 242 birds following a tractor 10/10/22 and 133 on Bartletts 6/01/23). Herring gull activity related to birds flying over the site or loafing on fields (e.g. 67 on Pole Field 6/01/23 and 39 on Pole Field 8/11/22). Very low numbers of lesser black-backed gull (*Larus fuscus*) and common gull (*Larus canus*) were recorded, with peak counts of two and ten birds respectively.
- 4.41 The numbers of gulls recorded at during the surveys are not exceptional, especially given the coastal location. The site is of local importance only for wintering gulls.

Pigeons and doves

- 4.42 Woodpigeon are very abundant across the site with counts ranging between 178 and 580 birds during the survey period. Flocks of 100 or more birds were recorded on 6 of the 12 surveys and on one date two

flocks in excess of 100 birds were noted. The largest flocks recorded consisted of 127 birds. The birds were very mobile and this may have led to some double-counting. However, it was obvious that the wintering population was smaller than the winter of 2021/22.

- 4.43 Stock dove numbers were generally lower than in 2021/22 with the barley dump at the western flight ponds once again proving attractive to birds. The wintering population was below 100 birds for most of the winter period with flocks of c70 birds recorded on only three survey visits (23/12/22, 8/02/23 and 10/03/23). Small numbers of collard dove (*Streptopelia decaocto*) and feral pigeon (*Columba livia*) were recorded using the site.
- 4.44 The wintering population of stock dove are considered to be of district importance. The wintering populations of woodpigeon is considered to be of local importance. The records of feral pigeon and collard dove are of no conservation significance.

Owls

- 4.45 A barn owl was recorded hunting over land west of 19 Acres and Upper Chain Bridge (Medmerry), outside of the survey area, during the late January survey (24/01/23). After the survey concluded on 10/03/23 a barn owl was observed flying over Upper and Lower Chain Bridge within the site. The grassy field margins and ditch and rife banks provide suitable foraging habitat for barn owl. It is likely that birds make use of the site for foraging. The site is of local importance for this species.
- 4.46 A short-eared owl was flushed from a hedgerow to the west of the site after the survey had concluded in early March (10/03/23). The owl flew across the solar farm and 19 Acres trying to evade the attention of crows. There were sporadic sightings of short-eared owl at Medmerry during February and March, and it is likely this sighting relates to a bird wintering in the local area. This record is not considered to be of any conservation significance.

Woodpeckers and kingfisher

- 4.47 A single kingfisher was recorded on a single visit. Based on the findings of previous surveys kingfisher appear to make sporadic use of the ditches and rifes on site for feeding. The site and surrounding area support two or three pairs of green woodpecker (*Picus viridus*) and two

pairs of great spotted woodpecker were recorded. The populations of these species wintering on site are of local importance only.

Corvids

- 4.48 Magpie (*Pica pica*) numbers typically ranged between 15 and 30 birds during the survey period with groups of up to 9 birds recorded. Jackdaw numbers were generally low (less than 20), with a maximum count of c40 birds feeding on Grange (8/11/22). A flock of 154 heading west over 19 Acres on 24/01/23 were assumed to be heading to an off-site roost. Rook numbers varied throughout the survey with a maximum count of 97 birds and a minimum count of 9 birds. The largest flock recorded totalled 78 birds, with an average count of 50 birds over the 12 survey days.
- 4.49 Carrion crow (*Corvus corone corone*) numbers ranged between 12 and 85 birds with flocks of up to 32 birds recorded. As in previous years there appears to be a substantial corvid roost in the off-site woodland area east of Long Slip and Copse Field. Jay (*Garrulus glandarius*) were recorded in low numbers from woodland within and around the survey area, with a maximum count of 5 birds.
- 4.50 Raven were recorded flying over the site on four different dates, with all records relating to a pair of birds. It is probable this species is now becoming established in the local area.
- 4.51 The populations of common corvids recorded on site are of local importance only. The presence of a probable pair of raven is noteworthy given that this species is scarce breeding resident in Sussex. The wintering raven population is of district importance.

Crests and tits

- 4.52 Very small numbers of goldcrest (*Regulus regulus*) were recorded from scrub, hedgerows, woodland and gardens across the survey area. A firecrest (*Regulus ignicapillus*) was noted from a hedgerow within the survey area on 6/01/23 with small numbers of firecrest known to winter in the local area. Blue tit (*Cyanistes caeruleus*), great tit (*Parus major*) and long-tailed tit (*Aegithalos caudatus*) were all recorded over the survey period. These populations are of local importance only.

Wren and dunnock

- 4.53 Wren (*Troglodytes troglodytes*) were recorded during every survey visit with a maximum count of 21 birds. This species is widespread across the site with the wintering population estimated to be in the region of 20 birds.
- 4.54 Dunnock (*Prunella modularis*) were recorded throughout the survey period, with all counts in single figures. The wintering populations of both species are of local importance only.

Warblers

- 4.55 Small numbers of chiffchaff (*Phylloscopus collybita*) were recorded in every month except January and are likely to have been present on site throughout the winter period. Peak numbers were recorded in October and March suggesting passage birds are also using the site. Cetti's warbler (*Cettia cetti*) was heard singing from ditches across the site throughout the survey period.
- 4.57 Dartford warbler (*Sylvia undata*) were recorded in early October (1 bird) and late November (3 birds). Wintering Dartford warbler were present in scrub around Medmerry over the winter period and these records are considered likely to be linked to the small over-wintering population in the local area. The scrub habitat bordering the golf course was favoured by this species.
- 4.58 Small numbers of chiffchaff winter throughout Sussex and Cetti's warbler is an increasing common resident. The wintering populations of these two species is of local importance only. The lack of evidence of over-wintering Dartford warbler on site throughout the survey period suggests the population is local importance only, using peripheral parts of the site as foraging habitat.

Thrushes and starling

- 4.59 The site possibly supports two pairs of mistle thrush (*Turdus viscivorus*) with small numbers of birds infrequently recorded throughout the survey period. The peak counts of blackbird (*Turdus merula*) were of ten birds or fewer throughout the survey period with the exception of early December when 24 birds were recorded on site. Song thrush (*Turdus*

philomelos) counts were in single figures throughout except for a count of 10 in early December.

- 4.60 Fieldfare were recorded on four occasions with a maximum count of two birds. Redwing were only recorded on three survey visits with a peak count of seven birds in early March.
- 4.61 Large flocks of common starling were observed to the west of the survey area associated with the wastewater treatment works. A flock of c400 birds flew over the site in early October. Flock sizes were generally small with no flock over 50 birds recorded using the site for feeding.
- 4.62 The populations of wintering thrushes and common starling are of local importance only. The numbers recorded were generally low, presumably because of the unsuitability of much of site for these species.

Larks, pipits and wagtails

- 4.62 Skylark numbers varied between 44 and 134 birds over the winter period with an average count of 90 birds over the 12 survey visits. A flock of c65 on Kennets (6/01/23) and 64 on Drift Road (24/01/23) were the largest flocks recorded over the winter period. Maximum counts exceeded 60 on 11 of the 12 survey dates and the winter population during 2022/23 is estimated to be 80 -100 birds.
- 4.63 Peak counts of meadow pipit occurred during October, January and February, with maximum counts of over 100 birds made during these three surveys. Fluctuating numbers of meadow pipit were present on site between November and March with recorded numbers varying between 19 and 168 birds. The wintering population was estimated to be in the region of 60-80 birds distributed widely across the site. A single rock pipit (*Anthus petrosus*) was recorded feeding on flood ground on Kennets in late October.
- 4.64 The wintering population of skylark site during 2022/23 is of district importance and the wintering population of meadow pipit of local importance.
- 4.65 The site supports a small number of wintering grey wagtail (*Motacilla cinerea*) (max count 5) with the areas around the reservoirs and flooded ground around Park Farm regularly attracting birds. Pied wagtail (*Motacilla alba yarrellii*) numbers peaked in early December (76 birds)

with 75 birds recorded in early March and 70 birds in late January. Average counts across the 12 surveys were around 39 birds. Large flocks were a feature when peak counts occurred (e.g. a flock of 62 birds in early December on Grange and 64 on Ferry Barn in early March). The wintering population pied wagtail is of district importance and the grey wagtail population is of local importance.

Finches, sparrows and buntings

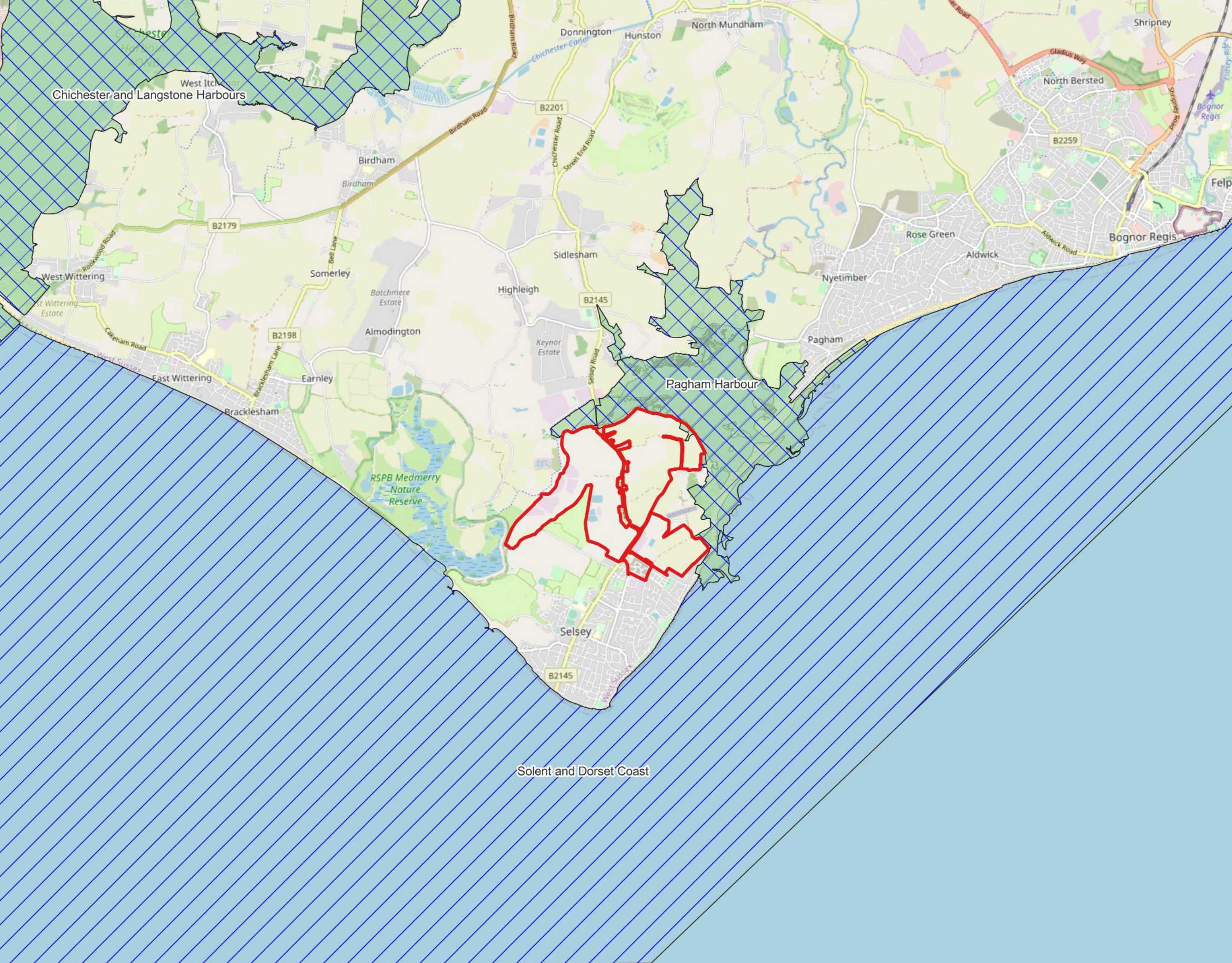
- 4.66 Linnet (*Linaria cannabina*) were only present on site in notable numbers during October. A flock of c120 were on Chases Marsh with c60 on Long Slip on 10/10/22 with flocks of 17 on both Long Coles and Long Slip on 26/10/22. After this, maximum counts were generally of fewer than 10 birds. Passage siskin (*Carduelis spinus*) were noted flying over the site in October.
- 4.67 Chaffinch (*Fringilla coelebs*) and greenfinch (*Carduelis chloris*) counts varied across the survey period with the wintering population estimated to be around 10 to 15 birds. Goldfinch (*Carduelis carduelis*) numbers also fluctuated with a peak count of 54 birds and a minimum count of 3 birds. Flocks of 20 or more goldfinch were recorded on two separate dates.
- 4.68 The site did not support a significant wintering linnet population over the winter, with only small numbers noted after October. The site is likely to form part of the wintering range of a population of linnet of district importance. The populations of other finch species are of local importance only.
- 4.69 Small numbers of house sparrow (*Passer domesticus*) were recorded during the surveys, mostly associated with human habitation. A peak count of 14 birds was made in October, which included a flock of 11 birds in a hedge adjacent to a house. The house sparrow population is of local importance only.
- 4.70 Reed bunting was regularly recorded throughout the survey period, with typically one and three birds noted. Occasional yellowhammer were recorded during the early winter period, but from late January until early March a small flock (20-30 birds) was regularly recorded feeding on Compton's and the banks of the irrigation reservoir.

- 4.71 The small wintering population of reed bunting is of local importance only. The wintering population of yellowhammer is of district importance.

5.0 Limitations and further work

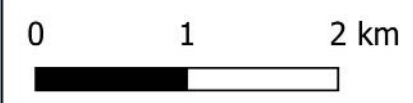
- 5.1 The survey route kept to existing public rights of way and field edges. This may have resulted in the under-recording of passerines and certain wader species such as common snipe. The main purpose of the survey was to record ducks, geese and waders using the site so under-recording of passerines utilising the fields for foraging is not considered a significant limitation.
- 5.2 As noted earlier the site is subject to a degree of public access which is not restricted to recognised public rights of way. It is possible that birds feeding or roosting on fields may have been disturbed prior to the surveyor arriving. Normal agricultural activities may also have influenced bird distribution during the surveys, either through displacing birds or attracting them (i.e. following the plough).
- 5.3 Heavy rain showers reduced visibility and hampered the use of binoculars and telescopes for brief periods during the survey on 08/11/22. Smaller birds may have been missed but it is considered larger waders, ducks and geese would still have been detectable by the surveyor during periods of inclement weather. Comparing results from this survey to the other surveys did not highlight any discernible differences in numbers and species of waders, ducks and geese recorded.
- 5.4 The surveys were undertaken during daylight hours. It is known that certain wader species will feed at night on arable land, notably golden plover and lapwing. Common snipe will also utilise sites at night and other species such as wigeon may also use grassland areas. It is possible that birds are utilising the site at night.
- 5.5 Surveys over five winters have shown only minor differences in the composition of the wintering bird community on site. The surveys show that the use of the site by some species, notably golden plover and brent geese, depends on the state of the fields and the availability of other suitable habitat around the harbour. Other wader species and gulls also make temporary use of the fields in hard weather or after surface water flooding.
- 5.6 The Sesley area is monitored daily by an active ornithological group (<https://selseybirder.blogspot.co.uk>). The sightings posted on their website show various records of waders, ducks and geese present within the survey area over the winter period. Were they available, the

records of this group would help to identify key areas used by birds for foraging or roosting within the survey area over the winter period.





-  Survey Area
-  Ramsar Sites
-  Special Protection Areas

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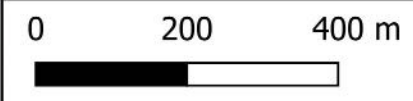
Wintering bird survey 2022/2023
 Figure 1: Site context
 Date 26/04/2023
 Draft
 Drawn by DC



-  Survey Area
-  Field Boundary



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Wintering bird survey 2022/2023
Figure 2: Field names
Date 26/04/2023
Draft
Drawn by DC



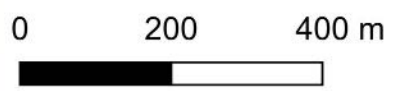
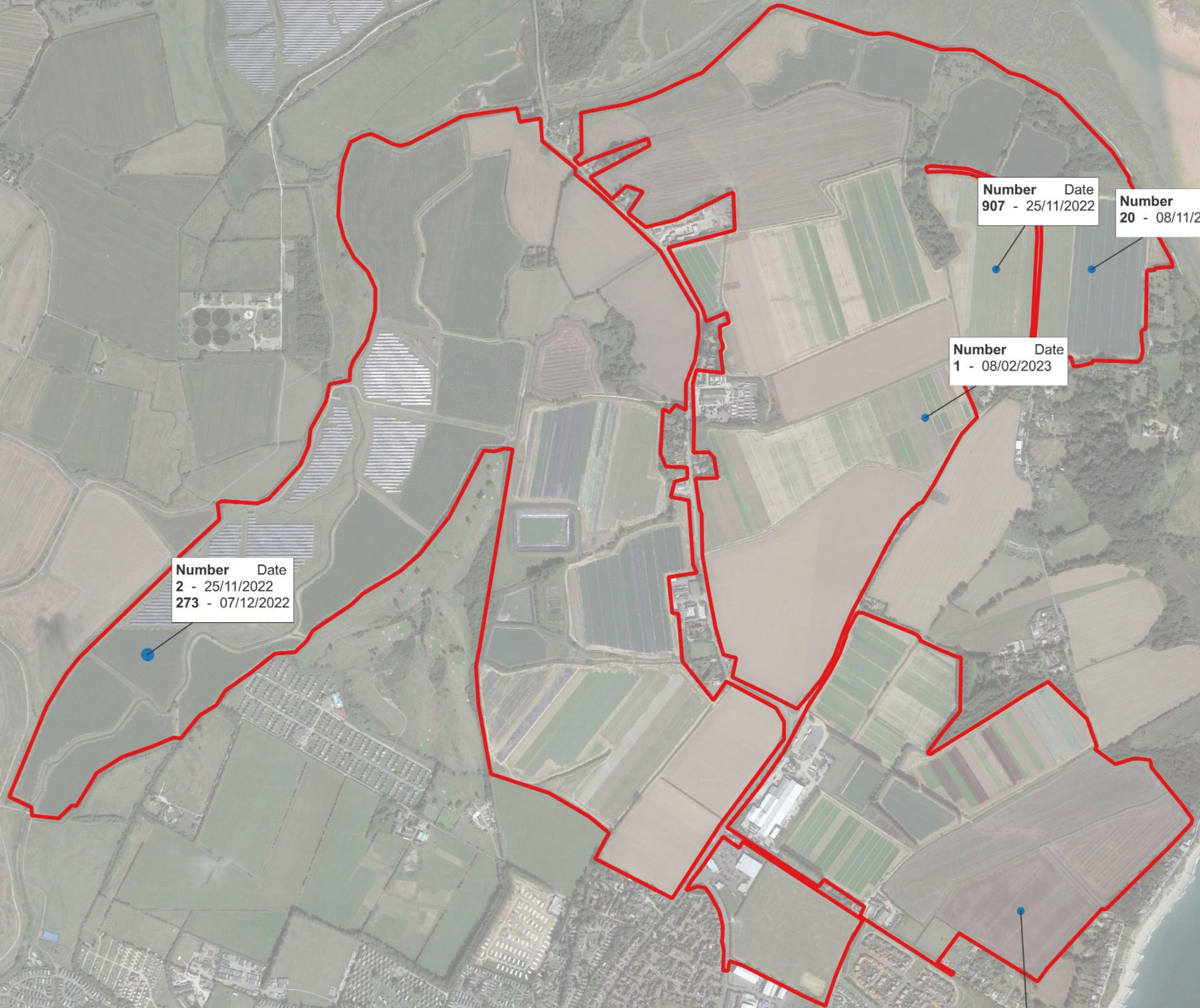


 Survey Area

Distribution of sightings over survey period

-  1
-  2
-  3-4
-  5+


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Wintering bird survey 2022/2023
Figure 3: Brent Goose records
Date 27/04/2023
Draft
Drawn by DC





 Survey Area

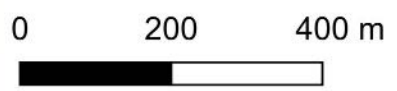
Distribution of sightings
over survey period

-  1
-  2
-  3-4
-  5+

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Map data ©2023 Google

Number	Date
43	10/10/2022
2	26/10/2022
10	25/11/2022
30	07/12/2022
36	06/01/2023
24	24/01/2023
78	08/02/2023
54	10/03/2023
11	22/03/2023

Number	Date
2	26/10/2022



Wintering bird survey 2022/2023
Figure 4: Eurasian teal records
Date 27/04/2023
Draft
Drawn by DC





Survey Area

Distribution of sightings over survey period

- 1
- 2
- 3-4
- 5+

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Number Date
1 - 10/03/2023

Number Date
14 - 10/10/2022
6 - 26/10/2022
6 - 08/11/2022
11 - 25/11/2022
8 - 07/12/2022
42 - 06/01/2023
17 - 24/01/2023
22 - 08/02/2023
47 - 22/02/2023
14 - 10/03/2023
15 - 22/03/2023

Number Date
3 - 22/03/2023

Number Date
1 - 22/03/2023

Number Date
2 - 23/12/2022
2 - 08/02/2023

Number Date
2 - 25/11/2022
2 - 22/02/2023

Number Date
4 - 10/03/2023

Number Date
2 - 22/03/2023

Number Date
2 - 06/01/2023
2 - 08/02/2023
1 - 22/03/2023

Number Date
2 - 24/01/2023
2 - 08/02/2023
1 - 22/03/2023

Number Date
1 - 26/10/2022
4 - 10/03/2023

Number Date
4 - 07/12/2022
2 - 23/12/2022
2 - 22/03/2023

Number Date
2 - 23/12/2022

Number Date
2 - 22/03/2023

Number Date
12 - 23/12/2022
2 - 06/01/2023

Number Date
3 - 24/01/2023
1 - 10/03/2023
1 - 22/03/2023

Number Date
4 - 10/03/2023

Number Date
6 - 08/11/2022
2 - 23/12/2022

0 200 400 m

Wintering bird survey 2022/2023
Figure 5: Mallard records
Date 27/04/2023
Draft
Drawn by DC










Number	Date
5	26/10/2022
1	24/01/2023
2	08/02/2023

Number	Date
1	08/02/2023


Number	Date
1	08/11/2022
1	25/11/2022

 Survey Area

Distribution of sightings over survey period

-  1
-  2
-  3-4
-  5+

Google Satellite
Map data ©2023 Google

0 200 400 m






Wintering bird survey 2022/2023
Figure 6: Little egret records
Date 27/04/2023
Draft
Drawn by DC



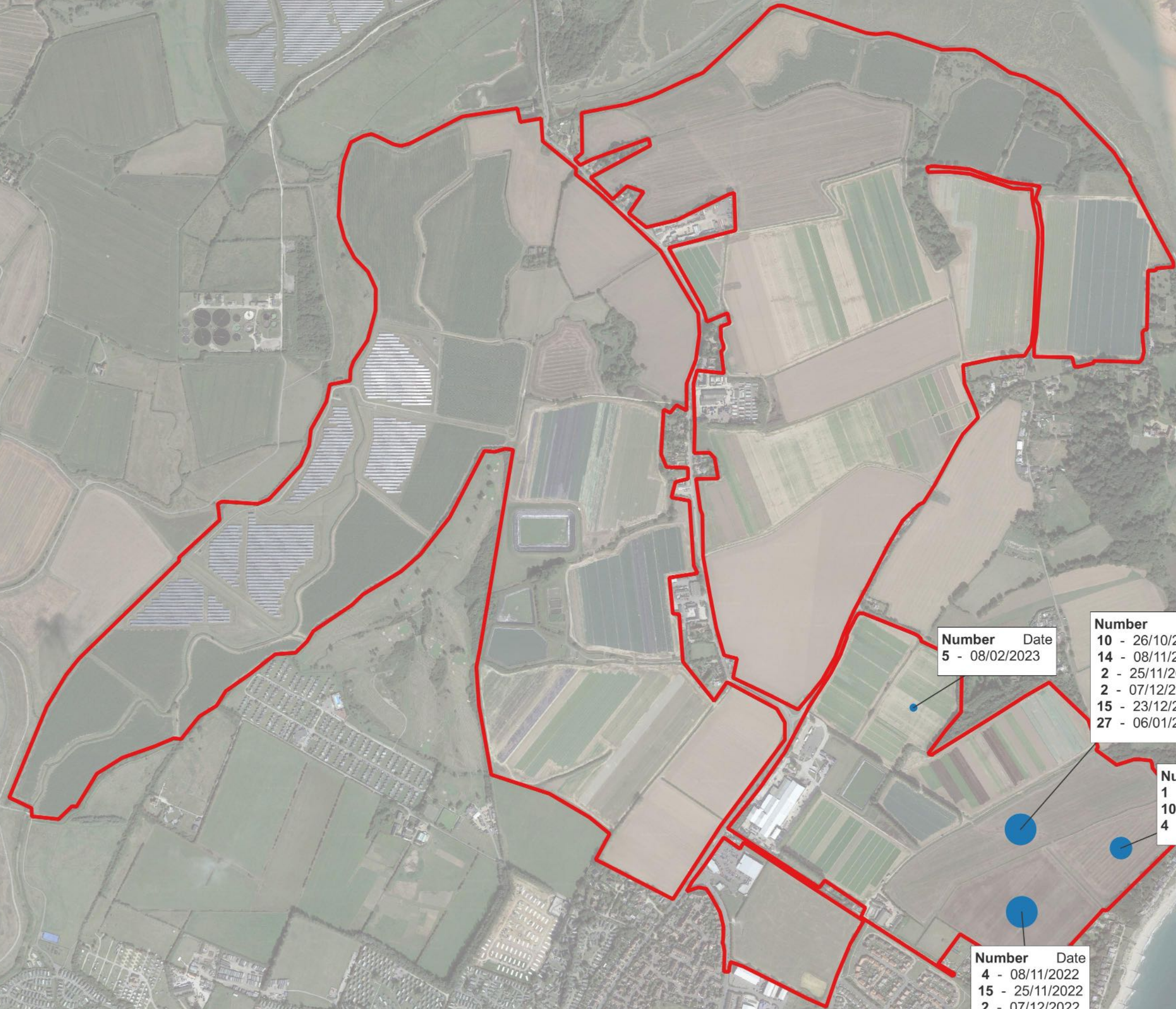


 Survey Area

Distribution of sightings over survey period

-  1
-  2
-  3-4
-  5+

Google Satellite
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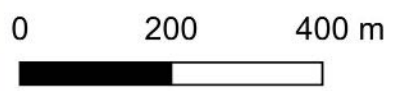


Number **Date**
5 - 08/02/2023

Number **Date**
10 - 26/10/2022
14 - 08/11/2022
2 - 25/11/2022
2 - 07/12/2022
15 - 23/12/2022
27 - 06/01/2023

Number **Date**
1 - 25/11/2022
10 - 22/02/2023
4 - 22/03/2023

Number **Date**
4 - 08/11/2022
15 - 25/11/2022
2 - 07/12/2022
6 - 23/12/2022
11 - 24/01/2023
8 - 10/03/2023







Wintering bird survey 2022/2023
Figure 7: Oystercatcher records
Date 27/04/2023
Draft
Drawn by DC






 Survey Area

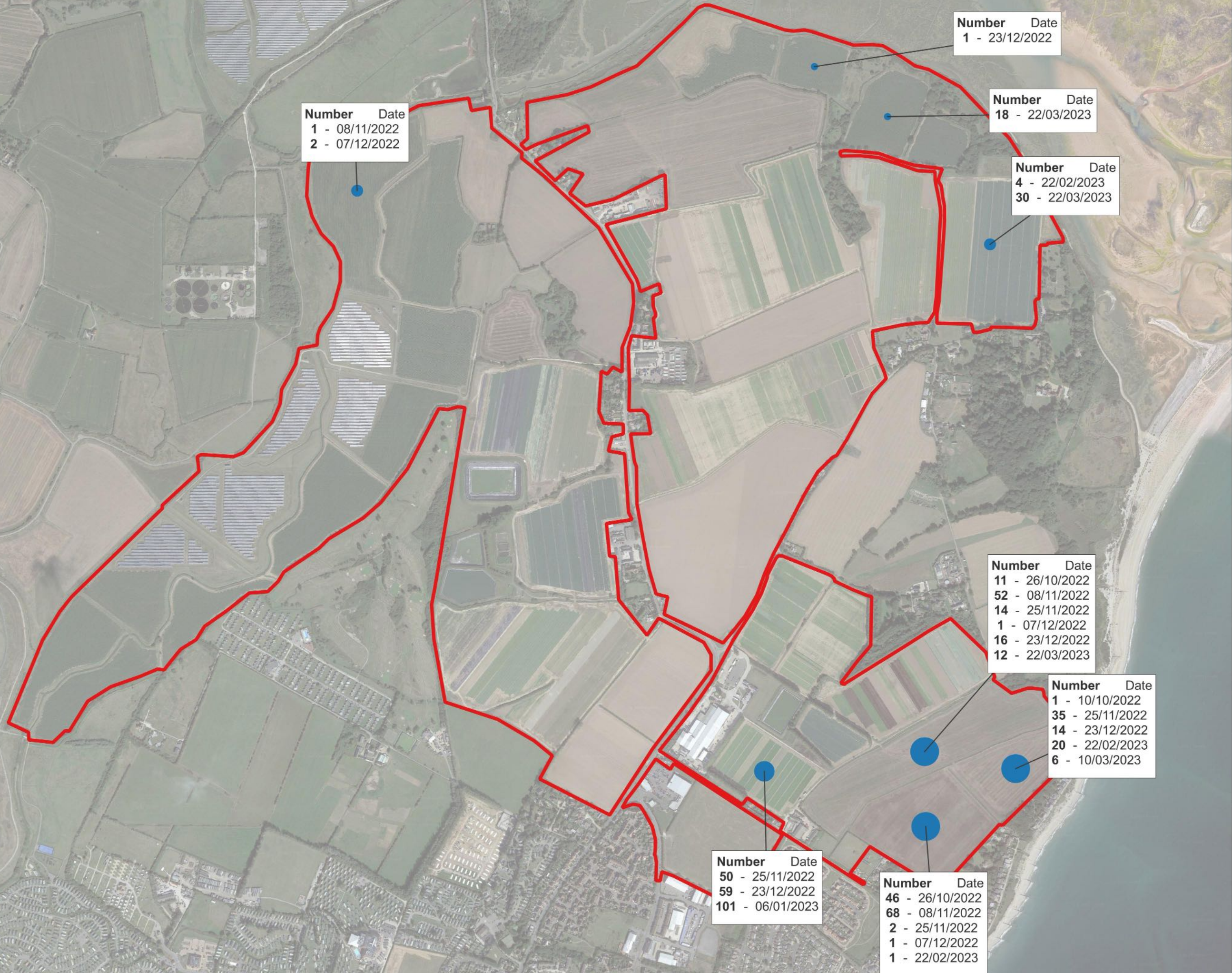
Distribution of sightings over survey period

-  1
-  2
-  3-4
-  5+

Google Satellite
Map data ©2023 Google

0 200 400 m


Wintering bird survey 2022/2023
Figure 8: Curlew records
Date 27/04/2023
Draft
Drawn by DC



Number	Date
1	08/11/2022
2	07/12/2022

Number	Date
1	23/12/2022

Number	Date
18	22/03/2023

Number	Date
4	22/02/2023
30	22/03/2023

Number	Date
11	26/10/2022
52	08/11/2022
14	25/11/2022
1	07/12/2022
16	23/12/2022
12	22/03/2023

Number	Date
1	10/10/2022
35	25/11/2022
14	23/12/2022
20	22/02/2023
6	10/03/2023

Number	Date
50	25/11/2022
59	23/12/2022
101	06/01/2023

Number	Date
46	26/10/2022
68	08/11/2022
2	25/11/2022
1	07/12/2022
1	22/02/2023



Number Date
184 - 08/11/2022
6 - 10/03/2023
11 - 22/03/2023

Number Date
1 - 07/12/2022

Number Date
8 - 24/01/2023

Number Date
126 - 08/11/2022
3 - 07/12/2022

Number Date
156 - 23/12/2022
1 - 22/03/2023

Number Date
1 - 24/01/2023


Number Date
15 - 24/01/2023

Number Date
107 - 24/01/2023





Number Date
69 - 24/01/2023

Number Date
67 - 24/01/2023

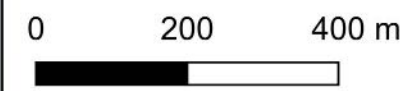
Number Date
14 - 24/01/2023

 Survey Area

Distribution of sightings over survey period

-  1
-  2
-  3-4
-  5+

Google Satellite
Map data ©2023 Google



Wintering bird survey 2022/2023
Figure 9: Lapwing records
Date 27/04/2023
Draft
Drawn by DC






Number Date
142 - 08/11/2022
128 - 08/02/2023
5 - 10/03/2023





Number Date
18 - 08/11/2022

Number Date
67 - 23/12/2022

Number Date
26 - 24/01/2023
146 - 22/03/2023

 Survey Area

Distribution of sightings over survey period

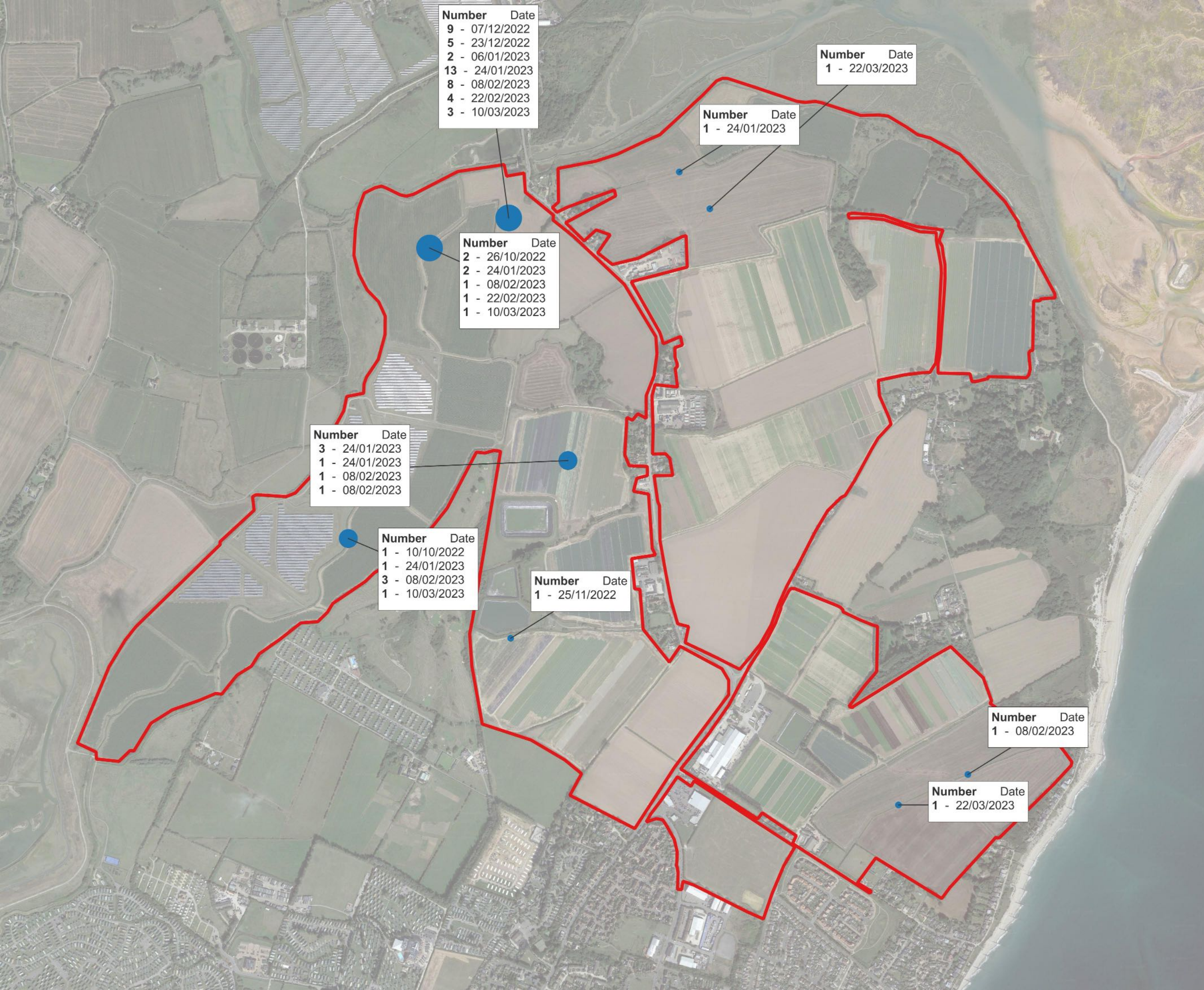
-  1
-  2
-  3-4
-  5+

Google Satellite
Map data ©2023 Google

0 200 400 m


Wintering bird survey 2022/2023
Figure 10: Golden plover records
Date 27/04/2023
Draft
Drawn by DC





Number	Date
9	07/12/2022
5	23/12/2022
2	06/01/2023
13	24/01/2023
8	08/02/2023
4	22/02/2023
3	10/03/2023

Number	Date
1	22/03/2023

Number	Date
1	24/01/2023

Number	Date
2	26/10/2022
2	24/01/2023
1	08/02/2023
1	22/02/2023
1	10/03/2023

Number	Date
3	24/01/2023
1	24/01/2023
1	08/02/2023
1	08/02/2023

Number	Date
1	10/10/2022
1	24/01/2023
3	08/02/2023
1	10/03/2023

Number	Date
1	25/11/2022

Number	Date
1	08/02/2023

Number	Date
1	22/03/2023



Survey Area

Distribution of sightings over survey period

- 1
- 2
- 3-4
- 5+

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Map data ©2023 Google

0 200 400 m

Wintering bird survey 2022/2023
Figure 11: Common snipe records
Date 27/04/2023
Draft
Drawn by DC



Appendix 1
Classification system used for BoCC5

Appendix 1: Classification system used for BoCC5

BoCC5 classification criteria

Red list

Species that are globally threatened (Critically endangered, endangered and vulnerable but not near threatened) using IUCN guidelines, as assessed by Birdlife International in 2021.

Historic decline: Historic decline in breeding populations. Species judged to have declined severely between 1800 and 1995 from an assessment conducted by Gibbens *et al* (1996) and which have not recovered subsequently.

Breeding population decline: Severe decline in UK breeding population size, either a decline of over 50% over 25 years or the longer-term defined as the period since first BoCC review (1969).

Non-breeding population decline: Severe decline in UK non-breeding population of over 50% over 25 year period or over longer-term defined as the period since first BoCC review (1969). Non-breeding trends were only assessed if a species has substantially independent breeding and non-breeding populations, otherwise only breeding population was assessed.

Breeding range decline: Species that have experienced a severe decline in the UK range between the breeding bird atlases in 1988-91 and 2007-11 or 1968-71 and 2007-2011 as measured by the calculated change in the number of occupied 10km squares.

Non-breeding range decline: Severe decline in UK range (more than 50%) between the wintering bird atlases in 1981-84 and 2007-2011 as measured by the calculated change in the number of occupied 10km squares.

Amber list

ERLOB: The European red list of birds was published in 2015 by Birdlife International. It covers IUCN red list assessments of regional extinction risk with no consideration of the wider suite of measures (species rarity, localization, moderate decline and depletion) included in SPEC assessments. Any species on the European red list (Critically endangered, endangered, vulnerable) is included on the amber list.

Historic decline – recovery: Species red listed for historic decline in a previous review but with a substantial recent recovery (at least 100% in last 25 years or the longer term period). Longer-term is defined as the period since first BoCC review (1969).

Breeding population decline: Species experiencing a moderate decline in UK breeding population (more than 25% but less than 50%) over 25 years of the

longer term period. Longer-term is defined as the period since first BoCC review (1969).

Non-breeding population decline: Moderate decline in UK non-breeding population (more than 25% but less than 50%) over 25 year period or over longer-term defined as the period since first BoCC review (1969). Non-breeding trends were only assessed if a species has substantially independent breeding and non-breeding populations, otherwise only breeding population was assessed.

Breeding range decline: Species that have experienced a moderate decline (more than 25% but less than 50%) in the UK range between the breeding bird atlases in 1988-91 and 2007-11 or 1968-71 and 2007-2011 as measured by the calculated change in the number of occupied 10km squares.

Non-breeding range decline: Moderate decline in UK range (more than 25% but less than 50%) between the wintering bird atlases in 1981-84 and 2007-2011 as measured by the calculated change in the number of occupied 10km squares.

Breeding and non-breeding rarity: Species with a UK breeding population of fewer than 300 pairs or with a UK non-breeding population of less than 900 individuals.

Breeding and non-breeding localisation: Localised breeding or non breeding population with at least 50% of UK population found in 10 or fewer sites. Sites were defined as either Special Protection Areas or Important Bird Areas. Rare breeding and non-breeding species were not assessed against this criteria as the small population size predisposes them to be restricted to a small number of sites.

Breeding or wintering population of International importance: Species with at least 20% of European breeding or non-breeding population found in the UK.

Stanbury, A., Eaton, M., Aebischer., Balmer, B., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D and Win, I (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the UK, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. *British Birds*. (114), pp. 723-747.

Appendix 2
Field observations: data sheet

FIELD OBSERVATIONS

Species	10/10/2022	26/10/2022	08/11/2022	25/11/2022	07/12/2022	23/12/2022	06/01/2023	24/01/2023	08/02/2023	22/02/2023	10/03/2023	22/03/2023
Mute swan	Status in Sussex Fairly common resident. 201-2,000	1 juvenile on Strawberry Reservoir										
Canada goose	Common introduced resident. 2,000-10,000		39 over Ferry 2.	918. 907 on Church Norton West. 2 on 19 Acres and 9 over 19 Acres.	273 on 19 Acres.		27. 11 on Pole Field. Groups of 4 and 4 over Ferry 1 and 6 over Granary.	474. All flocks flying over site towards Medmery. Flocks of 151, c100 and c100.		2 adults feeding on Bartlets	2 adults feeding on Bartlets	2 adults feeding on Bartlets
Brent goose	Very common winter visitor and passage migrant. 10,001-60,000		20 feeding on Church Norton East.									
Common shelduck	Fairly common winter visitor and scarce passage migrant. 201-2,000									Single bird feeding on Drift Road.		
Eurasian teal	Common winter visitor and rare breeder. 2,001-10,000	43 on western flight pond.	2 on western flight pond and 2 on Hogs Marsh reservoirs.	10 on western flight pond.	30 on western flight pond		36 on western flight pond.	24 on western flight pond and 7 over Ferry Gate Field.	78 on western flight pond.	65. 47 on western flight pond. 12, 2 and 2 over and 2 landed in ditch north end of Ferry 2.	12. 11 on western flight pond, 1 over 15 Acres.	5 on Compton's reservoirs.
Mallard	Common resident and winter visitor. 2,001-10,000.	18. 14 western flight pond. 2 pairs in flight.	7. One on Hogs Marsh reservoirs and 6 on western flight pond.	2. One in ditch on edge of 2 over Ferry 2.	Ferry 2.		22. 2 on Horse Pond, 2 on Grange, 2 on Park Field, 12 on Long Coles, 2 over Ferry 2 and 3 on eastern flight pond.	46. 42 on western flight pond, 2 on Long Coles and in ditch west side of 15 Acres.	25. 17 on western flight pond, 2 in ditch on west side of Gate Field, 3 on Strawberry reservoir and 3 in flight.	30. 22 on western flight pond, pair on eastern flight pond and pairs over Long Slip, in rifle west side of Gate Field and west side of 15 Acres.	38. 19 on western flight pond. 2 on Pangham Marsh. 2 on rifle in solar farm, all others over.	36. 14 on western flight pond. 2 pairs of Home Farm, 4 on Triangle, 2 pairs on Hogs Marsh reservoir, 1 on Strawberry reservoir and 1 in pond on Ferry Gate Field.
Pintail	Fairly common winter visitor. 201-2,000	3 over 19 Acres.	6 over 19 Acres.									
Gadwall	Very scarce breeder and fairly common winter visitor. 201-2,000									5 on western flight pond.		3. Pair on Hogs Marsh reservoirs and female on western flight pond.
Shoveler	Common winter visitor and very scarce breeder. 2,001-10,000	2 on Hogs Marsh Reservoirs		3 and 5 over Ferry Field.				c30 on Strawberry reservoir, presumably due to other waters being iced up.		1 on western flight pond.		
Tufted duck	Fairly common resident and scarce breeder. 201-2,000				1 on Hogs Marsh reservoir.					2 flushed from reservoirs on Compton's.	2. Pair on Hogs marsh reservoirs.	
Red-legged partridge	Common introduced resident. 2,001-10,000	8. (Shoot not active). Max group 6.	2	6	2. 13. Max group 6.		4. 9. Max group 5.	2	6	4	2	2
Pheasant	Very common introduced resident. 10,001-60,000	4. Shoot not active. Max group 3.	2	2	3		5	3	1	3	6	6
Comorant	Fairly common but localised resident and common winter visitor. 201-2,000.	1 over Ferry Gate Field.		4. Two singles and group of 2 over.	10. All over, largest group 3.		1 over.	3. 2 and 1 over.	7. Group of 5 and 2 singles over.	3 singles over.	2 singles over.	4. All singles over.
Little egret	Scarce and increasing resident. Wintering status unclear. 21-200	5 around Pangham Marsh.		1 on Woolhouse Marsh.	2 over Long Slip.			1 in ditch on Pangham Marsh.		1 in ditch on Pangham Marsh.		1 over Upper Chain Bridge.
Grey heron	Fairly common resident. 201-2,000			1 off eastern flight pond and 2 on Humphries.	2. One in ditch on edge of Woolhouse Marsh and one on Pangham Marsh.		One in ditch on edge of Woolhouse Marsh.	1 in ditch on Pangham Marsh.		1 over 15 Acres		
Little grebe	Scarce resident and winter visitor. 21-200				1 on Hogs Marsh reservoir.		1 on Hogs Marsh reservoir.			1 on western flight pond.		
Marsh harrier	Very scarce breeder and scarce winter visitor 21-200.	1 juvenile flushed from ditch on west side of 15 Acres.					1 juvenile hunting along ditch on west side of 15 Acres.			Female circling Ferry Gate Field, later seen at Medmery. Not juvenile seen in earlier surveys.		
Sparrowhawk	Common resident. 2,001-10,000	1		4 sightings including pair around Church Norton East.	3 sightings. Two different birds around Park Farm.		1. 3 sightings, probably all different birds. 1 hunting around Drift Road.		2 males seen.	1	1	
Common buzzard	Fairly common and increasing resident. 201-2,000	6. 2 around Hogs Marsh and 3 together over Park Farm.	7. Three together around western flight pond.	2. 5 sightings.	3 sightings.		4 sightings.	6 sightings including 2 together.	3 sightings (all singles). 1 in frozen ditch on southern edge of Long Slip.	7. 5 sightings including 2 of pairs.	9. 7 sightings including 2 of pairs.	6. 5 sightings including a pair around Hogs marsh reservoirs. 4 sightings.
Water rail	Scarce passage migrant and winter visitor. 21-200											
Moorhen	Very common resident. 10,001-60,000	9. 8 on western flight pond.	8. 5 on western flight pond.	6. 5 on western flight pond.	8. 6 on western flight pond.	8. Five on western flight pond and 3 on Humphreys.	4. 2 on western flight pond.	4. 3 on western flight pond.		2	3. 6. 3 on western flight pond.	5 on western flight pond.
Coot	Fairly common resident and common winter visitor. 2,001-10,000	1 on Strawberry Reservoir	1 on Strawberry Reservoir	4. 3 on western flight pond and 1 on Hogs Marsh	2 on western flight pond. 1 on Strawberry reservoir and 1 on Selsey reservoir.	3. 2 on western flight pond and 1 on Strawberry reservoir.	3. 1 on western flight pond, 1 on Strawberry reservoir and 1 on Compton's Reservoir 2.	3. 1 western flight pond, 1 Hogs Marsh and 1 Compton's Reservoir 2.	11. 8 on banks of Compton's Reservoir 2. 2 on Strawberry reservoir.	6. 4 on banks of Strawberry Reservoir.	4. 2 on western flight pond	8. 4 on Compton's reservoirs.
Oystercatcher	Scarce breeder and common winter visitor. 2,001-10,000	10 on Long Slip.	18. 14 on Long Slip and 4 on Pole Field.	18. 2 on Long Slip 1 on Copspe Field and 15 on Pole Field.	5. Two on Pole Field, two on Long Slip and one over Drift Road.	21. 15 on Long Slip and 6 on Pole Field.	27 on Long Slip.	11 on Pole Field.	5 feeding on Horse Pond	13. 10 on Copspe Field and 3 over Pangham Marsh.	8 on Pole Field.	4 flew onto Copspe Field.
Golden plover	Common winter visitor and passage migrant. 2,001-10,000	2. 1 over Long Coles and 1 over 19 Acres.	119 over Humphreys	Max 395. 142 on Kennets and 18 on Ferry 2. Max 90 circling Long Coles and 145 over Granary.		Max 367. Flock of 67 on Home Farm. Flocks of c120 and 15 over Kennets (and back into Harbour), 49 over Slurry Ramps, flocks of 46 and 33 over Ferry Field and flock of 37 over Ferry Gate Field.	60 over Compton's.	26 feeding with lapwing on Norton Corner.	145. 128 feeding on Kennets plus 17 over Kennets.	c240. Flocks of c180 and 59 over Ferry Barn and 1 over Granary.	609. 5 on Kennets. 74 over Pangham Marsh, 3 over Kennets. 27 over Pangham Marsh 2 and c500 over Pangham Marsh.	Max 376. 346 on Norton Corner, c200 over Home Farm and 30 over New Road Field.
Grey plover	Common winter visitor and passage migrant. 2,001-10,000						6 on Copspe Field.					
Ringed plover	Fairly common winter visitor and passage migrant. 201-2,000						3 on Drift Road.			3 feeding on Drift Road.		4 on Kennets.
Lapwing	Scarce to fairly common declining resident and very common winter visitor. 10,001-60,000			Max 311. 184 on Kennets and 126 on Ferry 2 and 1 over. 123. 52 on Long Slip	c180. 3 on Ferry 2, 1 on Pangham Marsh all others over.	Max 211. Flock of 156 on Home Farm, 3 and 18 over Kennets, and 34 over Ferry Gate.	Max 249. Flocks of 194, 44 and 11 over.	Max 286. 69 on Norton Corner, assume same on Palmers later (67), 107 on Compton's, 14 on Wakelies, 1 on Slurry Ramp, 8 on Pangham Marsh 2 and 15 on Drift Road.	126. 124 tried to land on Kennets but returned to harbour. 2 over Kennets.	c262. c260 over Ferry Gate and 2 over Ferry 2.	6 on Kennets.	14. 11 on Kennets, 1 on Home Farm and 2 over.
Outwren	Common passage migrant and winter visitor. 2,001-10,000	1 on Copspe Field.	58. 11 on Long Slip, 46 on Pole Field and 1 over Long Slip.	101. 2 on Pole Field, 35 on Copspe Field, 14 on Long Slip and 50 on Park Field.	8. 1 on Pole Field, 1 on Long Slip and 1 over Rookery.	90. 59 on Park Field, 16 on Long Slip, 14 on Copspe Field and 1 on Pangham March 2.	102. 101 on Park Field and 1 over Wakelies.		25. 20 on Copspe Field, 1 on Pole Field and 4 on Church Norton East.	6 on Copspe Field.		Max 62. 18 on Woolhouse Marsh, 30 on Church Norton East, 12 on Long Slip and two singles over.
Black-tailed godwit	Fairly common but localised winter visitor and passage migrant. 201-2,000									2 in flight over Ferry Gate.		
Bairn	Very common passage migrant and winter visitor. 10,001-60,000		3 with golden plover flock over Humphreys.				7 on Copspe Field.	1 feeding with lapwing on Drift Road.				Prob 5 with flock of golden plover over Home Farm.
Green sandpiper	Scarce winter visitor and passage migrant. 21-200			2 around Hogs Marsh reservoirs.			1 over Compton's.	3 on Compton's.	2. 1 on Compton's and 1 over Ferry 3.	2. Both south over Compton's from western flight pond.		
Common redshank	Scarce resident and common winter visitor and passage migrant. 2,001-10,000	2 on Pole Field.		1 on Pole Field and 1 on Copspe Field.	1 on Copspe Field.	1 on Copspe Field.	2 on Copspe Field.		3. 1 in ditch on Pangham Marsh and two cirked Pangham Marsh before returning to harbour.			4. 3 on Pangham Marsh and 1 on Pangham Marsh 2.
Common snipe	Very scarce breeder and fairly common winter visitor. 201-2,000	1 ditch on western side of 15 Acres.	2 flushed from ditch north end of Ferry 2.	1 off edge of Long Coles (by reservoirs)	12. 9 on Ferry Gate Field and 3 over Pangham Marsh.	5 flushed from flooded ground in Ferry Gate Field.	3. 2 on Ferry Gate Field and 1 over Upper Chain Bridge.		Max 32. 13 on Ferry Gate Field, 2 singles in ditch between Ferry 1 and Ferry 2. 1 flushed from ditch north end of 15 Acres, wisp of 7 over 19 Acres, 1 over Lower Chain Bridge, 4 on Compton's (1 and 1), 1 over Long Slip, 1 in ditch south side of Humphries and 2 over Slurry Ramp.	Max 15. 8 on Ferry Gate Field. Singles flushed from ditch on Copspe Field, ditch on south side of Compton's, ditch between Ferry 1 and Ferry 2, off Compton's and 3 in ditch west side of 15 Acres.	6. Four on Ferry Gate, 1 on Ferry 2 and 1 in ditch between Ferry 1 and Ferry 2.	5. 3 on Ferry Gate, 1 in ditch between Ferry 1 and Ferry 2 and 1 in ditch on west side of 15 Acres.
Jack snipe	Scarce passage migrant and winter visitor. 21-200				1 on Ferry Gate Field.							
Black-headed gull	Common breeder and very common to abundant winter visitor. 10,001-60,000+	279. 242 behind plough on Church Norton East.	25. Largest flock 10.	122. Flock of 74 on Pole Field.	174. Flock of 71 on Pole Field.	89. Largest flock 17 over Ferry 2.	210. Largest flocks 39 on Cases Marsh, 50 on Horse Pond and 58 over Ferry Field.	212. Flock of 133 on Bartlets and 22 over Ferry Field.	68. Flock of 14 on Norton Corner.	60. Flock of 30 over Ferry 1.	192. Flock of 145 feeding on Ferry Barn.	36. Max flock 10.
Mediterranean gull	Scarce breeder and fairly common winter visitor. 201-2,000	53. 48 behind plough on Church Norton East.	3. 41 on Pole Field.		7		2	44. Flock of 36 on Bartlets and 7 over Wakelies.		1		21. Flock of 12 on Compton reservoirs.

Common gull	Very common sometimes abundant winter visitor and occasional breeder: 10,001-60,000	3		1	10	1	1	1	3	1	1
Lesser black-backed gull	Fairly common winter visitor and scarce breeder: 201-2,000			1	1					1	2
Lesser black-backed gull	Very common resident and winter visitor: 10,001-60,000	53. 25 behind plough on Church Norton East.	22. Largest group 5.	66. Flock of 39 on Pole Field.	25. 17 on Pole Field.	20. Largest group 5.	39. Flock of 20 on Pole Field.	1 over Hogs Marsh reservoir. 111. Flock of 67 on Pole Field and 24 over solar farm.	13. Flock of 8 on Pole Field.	32. Largest group 7 over.	37. 11 on Compton reservoirs
Lesser black-backed gull	Common winter visitor and very scarce breeder: 2,001-10,000	1		29. Flock of 26 on Pole Field.	4		3. 10. 8 on Pole Field.		4	1	7. 15. Largest flock 5.
Great black-backed gull	Common resident: 2,001-10,000	102. Flock of 47 on Church Norton West.	32. Flock of 25 around western flight pond.	39. Flock of 14 around western flight pond.	38. 30 around Ferry Gate Field barn.	55. 23 around Ferry Gate Field barn.	89. 68 on Cases Marsh.	14. Largest group 5.	76. Flock of 34 around eastern flight pond and 21 in trees around Compton's reservoir.	134. Flock of c70 around western flight pond.	29. 15 around western flight pond. 79. Flock of 66 around western flight pond. 92. Flock of 45 around western flight pond.
Stock dove	Abundant resident and winter visitor: 60,000+	252. Largest flock 46.	178. Largest flock 45.	247. Largest flock 92.	410. Flocks of 105 and 96.	554. Two flocks of 114 birds recorded.	452. Flock of 126 on Horse Pond.	249. Largest flock 36.	301. Largest flock 35.	268. Largest flock 36.	Max 580. Largest flock 127. Numerous flocks 30-60 birds. Max 130. Largest flock c100 around Ferry Barn. Max 413. Largest flock 108.
Woodpigeon	Very common resident: 10,001-60,000	9	1		6	1	4	2	8	2	3
Collard dove	Common resident: 2,001-10,000										
Feral pigeon	Fairly common resident: 201-2,000								1. Hunting banks of Medmerry (just off-site after survey)	9	8
Barn owl	Scarce winter visitor and passage migrant: 21-200									14	1
Short-eared owl	Scarce winter visitor and passage migrant: 21-200										One flew over Upper and Lower Chain Bridge shortly after end of survey. 1 disturbed from hedgerow on RSPB Medmerry flew into site (mobbed by crows) across solar farm and 19 Acres.
Kingfisher	Common resident: 2,001-10,000	2	4	1	5	1	1	4	2	2	2
Green woodpecker	Common resident: 2,001-10,000				2	1	1	2	3	2	1
Great spotted woodpecker	Fairly common or common resident: 201-10,000	3	3	4	5	2	3	1	2	2	1
Kestrel	Scarce breeder: 21-200	1 imm over Ferry 1.			1 over Kennets.		28. 9 on Pole Field and 8 Long Coles.	26. Largest group 6.	29. Largest group 4.	30. Largest flock 6	19. Largest group 3.
Peregrine	Very common resident: 10,001-60,000	17. Max group 3.	12. Max group 2.	9. Max group 3.	22. Max group 3.	29. Max group 4.	30. 6 on Wakeles.	26. Largest group 6.	29. Largest group 4.	30. Largest flock 6	19. Largest group 3.
Maggie	Very common resident: 10,001-60,000	1	1	5	2	1	4	1	1	3	2
Jay	Very common resident: 10,001-60,000	45. Largest flock 16 over.	12. 2 groups of 6.	94. Largest flock c40 on Grange.	9. Largest group 7.	13. Largest group 9.	15. Largest group 5.	23. Largest group 10.	201. Flock of 154 over 19 Acres assume heading to roost.	17. Largest flock 15.	19. Largest flock 12.
Jackdaw	Very common resident: 10,001-60,000	38. Largest flock 9.	56. Largest flock 37.	9. 72. Flocks of 29 and 23.	56. Largest flock 31.	22. Two groups of 11.	67. Largest flock 16.	84. Largest flock 78.	One flock of 27	97. Largest flock 61.	49. Largest flock 31.
Rook	Very common resident: 10,001-60,000	85. Flock of 32 Church Norton East and 20 on Ferry 1.	38. Largest flock 15.	60. Flock of 27 on Grange.	49. Flock of 18 on Long Slip.	51. Largest flock 13.	26. Largest group 4.	55. Largest flock 16.	24. Largest flock 9.	51. Largest flock 7.	24. Largest flock 6.
Carrion crow	Scarce and increasing breeding resident: 21-200	3. Probably just a pair.					2 around Ferry Gate Field.	2 over solar farm.		2 perched in solar farm.	32. Largest flock 18.
Raven	Very common breeding resident and common winter visitor: 2,001-10,000	1	2	2	1	3	2	2	2	1	1
Goldcrest	Fairly common breeding resident, passage migrant and winter visitor: 201-2,000										
Firecrest	Abundant resident: 60,000+	5	3	1	7	4	3	1	in hedge on Church Norton East.	11	8
Blue tit	Abundant resident: 60,000+	2	1	2	5	4	3	6	6	14	8
Great tit	Very common but declining resident and common winter visitor: 2,001-10,000	74. Flocks of 17 over. 10 on Home Farm and 18 on 15 Acres.	130. Flocks of 34 on Long Coles and 22 on Drift Road.	99. Loose flock of 47 on Kennets.	63. Flock of 15 on Grange.	44. Flock of 7 on Norton Corner and flock of 5 on Drift Road.	80. Flock of 46 on Drift Road and 8 on Grange.	134. Flock of c65 on Kennets, 8 on Long Coles and 10 on New Road Field.	117. Flock of 46 on Home Farm and 64 on Drift Road.	111. Flock of c30 on Home Farm and 33 on Drift Road.	77. Flock of 29 on Kennets. 67. Flock of 43 on Home Farm. 83. Flock of 16 on Kennets and 12 on Drift Road.
Starling	Common but declining summer visitor and abundant passage migrant	16	1								
Barn swallow	Common but declining summer visitor and abundant passage migrant	36									
House martin	Fairly common and increasing resident and winter visitor: 201-2,000	2	2	1	5	2	1	1	1	6	1
Cetti's warbler	Scarce to fairly common localised resident: 21-2,000	1 juvenile west side of Long Coles.			3. One in scrub on west side of Lower Chain Bridge and pair along edge of Long Coles (by reservoirs).						2
Dartford warbler	Very common resident: 10,001-60,000										
Long-tailed tit	Very common summer visitor and passage migrant. Small numbers	2	8	3	Flock of 8	Flock of 5	12, including flock of 7.	9, including flock of 6.		4	5
Chiffchaff	Abundant resident: 60,000+	16	5	2	2	2	8	19	17	10	1
Wren	Common but declining resident and very common to abundant winter visitor: 10,001 - 60,000+	12	9	6	17	21	8	19	17	10	14
Common stalling	Abundant breeding resident and very common to abundant winter visitor: 10,001 - 60,000+	594. Flock of c400 over.	3. 91. Max flock c40	42. Max flock 26.	134. Two flocks of 32 birds.	93. Max flock 22.	49. Flock of 37.	117. largest flock 46.		14. 37. Largest flock 17.	6
Blackbird	Common to very common passage migrant and winter visitor: 10,001 - 60,000+	1	4	3	12	24	10	9	5	9	10
Falstarte	Very common but decreasing resident and common winter visitor: 2,001-60,000				1	2				2	1
Song thrush	Common to very common passage migrant and winter visitor: 2,001-10,000	2	1	4	2	10	6	2	5	5	3
Redwing	Common to very common passage migrant and winter visitor: 2,001-60,000										7
Fieldfare	Common resident: 2,001-10,000				2	3. 4. 3 on Church Norton East.	3. 2 on Church Norton East.				2 on Church Norton East.
Robin	Abundant resident: 60,000+	17	10	7	20	17	3	11	11	13	13
Stonechat	Fairly common resident: 201-2,000	4	4	3	9	11	5	2	2	5	5
Duncock	Very common resident: 10,001-60,000	2	2		5	8	5	5	1	9	2
House sparrow	Very common but declining resident: 10,001-60,000				14. Flock of 11.	4	2	4	2	8	3
Grey wagtail	Fairly common resident, winter visitor and passage migrant: 201-2,000	3. 5. 2 over Park-Field.		3. 2 around Park Farm.	3. 2 around Park Farm.	1 Park-Farm		3	3	2	2
Pied wagtail	Common resident and winter visitor: 2,001-10,000.	48. 23 on Church Norton West, 9 on Horse Pond.	24. 6 on Long Coles.	5. 58. Min of 32 on Grange.	76. Min of 62 on Grange.	21. Largest flock 7.		46. Flock of 40 on Kennets.	70. Flock of 14 on Home Farm and 45 on Horse Pond.	10	13. 75. Flock of 64 on Ferry Barn.
Meadow pipit	Common but declining resident and very common winter visitor: 10,001 - 60,000	79. Flock of 18 banks of Selsey Reservoir 2.	102. Flock of c20 on Wakeles and 10 on Drift Road.	49. Flock of 21 on Home Farm.	83. 35 on Grange.	58. Flock of 19 on Grange.		158. Flock of c50 on Kennets and c50 on Grange and 18 Ferry Field.	34. Largest flock 11 on Horse Pond.	88-135. Flock of 24 on Ferry Barn and 47 on Ferry 3 (Flock of 47 recorded later around solar farm may have been same as Ferry 3)	168. Flock of c80 birds on Horse Pond, 43 around solar farm and 31 on Granary. Assume passage birds (see stonechat).
Rock pipit	Scarce resident and winter visitor: 21-200				1 on Kennets						55. 18 on Ferry Barn and 15 on Ferry Gate Field.
Chaffinch	Abundant resident and very common winter visitor: 10,001 - 60,000	3	1	4	8	5	3	5	5	6	1
Greenfinch	Very common resident: 10,001-60,000	3	3		1	4		20. Flock of 16 around western flight pond.	6	13	4
Linnet	Fairly common but decreasing resident: 201-2,000	206. Flock of c120 on Chases Marsh and c60 on Long Slip.	48. Flocks of 17 on both Long Coles and Long Slip.	5 on Kennets.	8. 6 on Grange.	15. 9 on Compton's.		4	7	1	7
Linnet										7. 23. Flock of 17 on Kennets.	1

Goldfinch	Fairly common resident and winter visitor: 201-2,000	17. Largest flock 5.	54. Flock of 17 on Long Slip.	25. Flock of 20 on Long Slip.	47. Largest flock 10.	33. Flock of 12 over Grange.	10. Largest flock 6	27. Largest flock 10.	50. Flocks c20 and 24.	22. Largest group 7.	28. Largest group 6.	29. Largest flock 17.	3	
Siskin	Common winter visitor and passage migrant: 2,001-10,000	3 over.												
Yellowhammer	Common resident: 2,001-10,000	1 west side of Long Coles.				2			17 - flock on edge of Compton's 2 reservoir.	28. Flock of 24 on edge of Compton's 2 reservoir and 2 other pairs around Compton's.	8 around Compton's.	c25 on banks of Compton's reservoir.	4	
Reed bunting	Fairly common resident and winter visitor: 201-2,000		3	3	48	6	1		2			3	1	
			58	54		60	66	58	62	56	60	61	60	56