

Appendix 10.6 Wintering Bird Survey 2004 - 2006

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M74 JUNCTION 5, RAITH

WINTERING BIRD SURVEY 2005/2006

REPORT

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1 INTRODUCTION

This report presents the findings of field surveys of wintering birds in relation to the proposed improvements to Raith Junction. The aim of this survey report is to produce baseline data to assist in the identification of potential impacts, inform scheme design development and the development of appropriate mitigation.

The same conservation categories have been used as for the Breeding Bird Survey work carried out for the scheme (Appendix 10.5). These criteria however, refer to the British breeding and/or resident population. Therefore, even though the huge numbers of Redwing and Fieldfare which occur in this country in winter are technically amber-listed, this criterion should not be applied to any EIA where the occurrence pattern is exclusively continental wintering birds. The following points are relevant in this context.

The majority of British birds are protected under the Wildlife and Countryside Act 1981 (as amended), Section One of which makes it an offence to intentionally or recklessly kill, injure or take any wild bird, nest or egg.

Birds of Conservation Concern 2002-7 was used as a guide to the national significance of bird species.

Red list species are those that are globally threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years and those that have declined historically and not shown substantial recent recovery. The red listed species all have national Biodiversity Action Plans.

Amber list species are those with an unfavourable conservation status in Europe; those species whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders and those with internationally important or localised populations.

Green list species are those which do not fulfil any of the above criteria.



2 METHODOLOGY

Survey visits were carried out on 26th October, 08th November, 26th November, 13th December, 14th January and 18th February 2004/2005; to inform the Stage 2 assessment of three alternative scheme options.

Further survey was conducted on 23-24th October, 18-19th November, 6th December, 24-25th January and 17-18th February 2005/2006.

Surveys were carried out by experienced ornithologists.

Various recording methods were used including long range visual observation from the lay by to survey for wildfowl on Bothwell Pond; tape luring for Water Rail and possible Willow Tits; specifically quartering suitable habitat for Snipe species. Attention was also given to any regular roosting/feeding movements and the flight height of, notably, gulls roosting of Strathclyde Country Park;

All other species were located by walking a route covering the whole of the terrain obviously paying more attention and therefore progressing more slowly in woodland than, for example, the more manicured camping site habitat;

Care was taken not to survey in winds exceeding Force 3 or during periods of rainfall.



3 SURVEY LIMITATIONS

The main constraint to the survey was background traffic noise from the M74, junction and associated roads, making it more difficult to hear bird calls. This problem was combated by spending more time in the two most critical areas: the northern end of Hamilton Low Parks SSSI and the south western corner of Bothwell Pond (lying just to the north of the A725).

A limitation with all winter bird surveys is the mobility of certain species, potentially leading to duplication, especially with tit flocks, or not recording at a location when certain species are using it, who then move on to another area.

As winter birds are not as territorial as breeding birds, displacement out of the survey area by for example dogs and noisy people, is also more of a problem than during the breeding season.

Overnight frost or snow may displace birds into or out of an area, however, it could be argued that this is part of normal winter conditions. During this survey, frozen conditions appeared to result in extremely local displacement by snipe and wildfowl to locations very close by (as noted during the January/February visits).

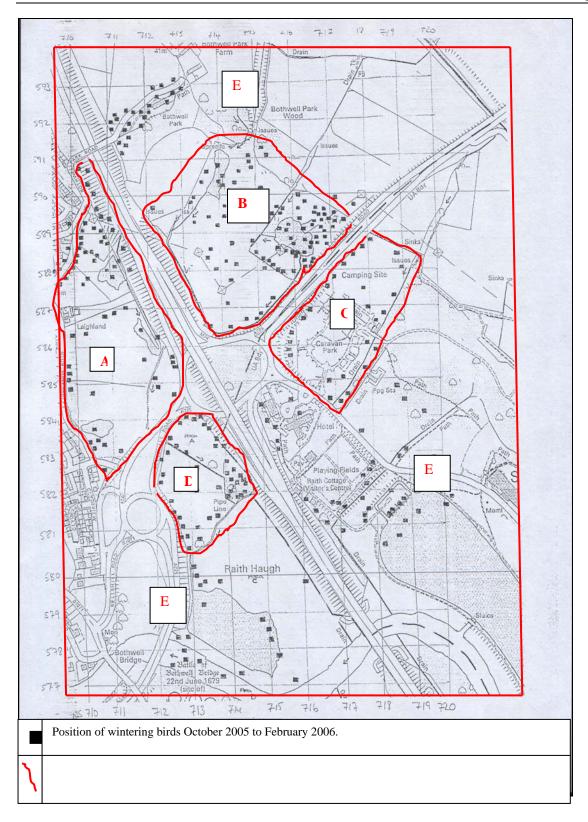


4 RESULTS

Map 1 shows the density and distribution of birds in the whole of the survey area. It is a summary map of the wintering bird records from October 2005 to February 2006. In compiling the map every effort was made to avoid duplicate records

To aid analysis the map is divided into areas (A- E) surrounding the proposed scheme.





Map 1 Summary map (2005-2006) showing density and distribution of birds in winter in the Raith Junction survey area.

Stage 3 Report: Part 1 - Appendices



The Red and Amber species fall into the following categories:

RED LISTING CRITERIA

IUCN Globally Threatened

HD Historical population decline in UK during 1800-1995

BDp Rapid (≥50%) decline in UK breeding population over last 25 years

BDr Rapid (>50%) contraction of UK breeding range over last 25 years

AMBER LIST CRITERIA

HDrec Historical population decline during 1800-1995, but recovering: population size has more than

doubled over last 25 years

BDMp Moderate (25-49%) decline in UK breeding population over last 25 years

BDMr Moderate (25-49%) contraction of UK breeding range over last 25 years

WDMp Moderate (25-49%) decline in UK non-breeding population over last 25 years

SPEC Species with unfavourable conservation status in Europe

2 or 3 (SPEC = Species of European Conservation Concern)

BR Five-year mean of 1-300 breeding pairs in UK

BL ≥50% of UK breeding population in 10 or fewer sites, but not BR

WL <u>></u>50% of UK non-breeding population in 10 or fewer sites

BI \geq 20% of European breeding population in UK

WI ≥20% of NW European (wildfowl), East Atlantic Flyway (waders) or European (others) non-breeding

populations in UK

(1) = decline >50% but trend provisional or possibly unrepresentative of the UK.



TABLE 1. Red list species – showing average numbers of birds from October 2005-February 2006

AREA ON MAP 1	A	В	С	D	Е	
			CARAVAN			RED LIST
RED LIST SPECIES	LAIGHLAND	BOTHWELL	&CAMP SITE	SSSI -N END	REST	CRITERIA
Bullfinch		2		1	4	BDp
House Sparrow	8					BDp
Reed Bunting		2				BDp
Song Thrush	1	1	1	3	1	BDp
Starling	14				5	BDp

TABLE 2. Amber listed species - average numbers 2005 - 2006

AREA ON MAP 1	Α	В	С	D	E	AMBER LIST
AMBER LIST SPECIES	LAIGHLAND	BOTHWELL	C & CAMP SITE	SSSI - North END	REST	CRITERIA
Black-headed Gull		2			64	BDMP.BL
Cormorant					12	BL. WI
Common Gull					3	BDMP.SPEC2or3.BL
Dunnock	3	4	2	2	4	
Fieldfare	5	5	5		2	BDMP
Gadwall		4				SPEC2 or 3.BL.WI
Goldcrest	1	1		2	3	
Golden Plover					54	
Goldeneye					6	BR. WL
Greylag Goose					26	n/a at this site
Grey Wagtail	1				2	BDMP
Herring Gull					1	BDMP(1).BL
Lapwing *					67	BDMP. WI. Local



						BAP
Lesser BB Gull			1			BL.BI
Lesser Redpoll	3	3				BDMP(1). BI
Mistle Thrush	2		1	2	3	BDMP
Mute Swan		2			4	BI
Redwing	15	54	6	17	2	BR
Shoveler		20				WI
Snipe		4				BDMP(1)
Teal		3			11	WI
Whooper Swan	2			3		BR. WL. W1
Water Rail		3				BDMP

^{*.} Lapwing is a Local (Lanarkshire) BAP species

TABLE 3 Green listed species – average numbers 2005 - 2006

AREA ON MAP 1	Α	В	С	D	E
GREEN LIST SPECIES	LAIGHLAND	BOTHWELL	CARAVAN &CAMP SITE	SSSI - North END	REST
Blackbird	1	2	7	6	5
Blue Tit	4	4	4	5	3
Buzzard		1		1	
Canada Goose					7
Carrion Crow	1	3			2
Chaffinch	10	2	5	7	2
Chiffchaff					
Coal Tit	2		2	2	1
Coot	2	7			1
Goldfinch	2	2	2	3	3



AREA ON MAP 1	Α	В	С	D	E
GREEN LIST SPECIES	LAIGHLAND	BOTHWELL	CARAVAN &CAMP SITE	SSSI - North END	REST
Goosander					1
Great S.Woodpecker					1
Great Tit	3	3	2	2	2
Greenfinch	1	2	5		4
Grey Heron	1				2
Jackdaw			4		1
Jay			2		
Little Grebe		1			
Long-tailed Tit	7	7	5	7	11
Magpie	2	1	3	3	3
Mallard	7	3			26
Moorhen		3			4
Pheasant				2	
Pied Wagtail	1				
Robin	6	2	4	3	3
Rook	1	4			1
Siskin	8	3	2		10
Sparrowhawk				1	
Treecreeper			1	1	1
Tufted Duck					11
Woodpigeon	9	6	5	3	58
Wren	3	4	3	3	3
Waxwing					4



Table 4 Species recorded each survey occasion 2004/05 Areas A-E

Date	26-Oct	08-Nov	26-Nov	13-Dec	14-Jan	18-Feb	Maximum Count
Magpie	1	1	9	13	12	13	13
Black-headed Gull	0	9	21	31	3	12	31
Blue Tit	7	20	40	27	29	28	40
Carrion Crow	1	3	12	7	5	17	17
Chaffinch	0	9	2	20	4	0	20
Coal Tit	0	0	2	4	3	0	4
Blackbird	2	10	15	41	24	27	41
Bullfinch	6	0	3	0	0	0	6
Buzzard	0	2	2	2	0	2	2
Coot	0	2	1	9	4	6	9
Goldeneye	0	0	8	4	8	8	8
Kestrel	0	1	0	0	0	2	2
Linnet	0	0	0	0	0	2	2
Moorhen	1	0	0	0	0	3	3
Pheasant	0	7	1	1	0	0	7
Redpoll	0	0	1	6	0	0	6
Snipe	0	0	0	3	14	20	20
Starling	0	0	0	29	0	1	29
Teal	0	13	3	10	67	11	67
Wood Pigeon	0	2	21	7	8	29	29
Siskin	0	0	0	4	59	0	59
Treecreeper	0	0	0	2	2	0	2
Wigeon	0	0	1	0	0	0	1
Woodcock	0	0	0	0	0	2	2
Goldfinch	5	0	6	11	5	7	11
Greenfinch	0	0	0	2	9	0	9
Robin	10	8	1	20	16	5	20
Fieldfare	28	35	8	261	4	85	261
Goosander	0	0	0	0	3	0	3
Cormorant	0	27	7	6	3	2	27
Great Spotted							
Woodpecker	0	0	0	1	3	0	3
Great Tit	0	4	9	8	10	10	10
Heron	0	1	2	0	3	2	3
Dunnock	2	3	4	10	11	2	11
Lesser Black-backed			0		0	_	_
Gull Long-tailed Tit	2	0 15	0 22	0 4	3	0	22
•			1	+		+	
Mallard Migtle Thrush	2	30	29	22	18 1	31 1	31 13
Mistle Thrush	0	0	3	13	2	2	3
Mute Swan	0	0	55	0	0	0	
Lapwing Falcon	0	0	0	0	0	1	55 1
Peregrine Falcon	0	33	2		+	8	143
Redwing	1			143	70		
Reed Bunting	0	1	0	1	0	0	3
Rook Song Thrush	0	0	0	2	0	3	1
Song Thrush	0	0	0	0	1	0	
Tufted Duck	1	2	0	0	0	22	22



Date	26-Oct	08-Nov	26-Nov	13-Dec	14-Jan	18-Feb	Maximum Count
White Wagtail	0	0	0	1	2	1	2
Whooper Swan	0	0	2	8	0	4	8
Wren	2	1	5	18	16	4	18
Total number of birds recorded	71	239	299	755	477	374	755



5 IMPACTS

Potential impacts on wintering birds include:

- Collision risk with overhead wires/elevated structures/signage or lighting given the
 greater number of the larger and less mobile species such as wildfowl overflying the
 junction. The scheme design does not require construction of elevated sections of
 road nor will there be significant new or higher overhead wires or lighting etc. A new
 pedestrian/cycle way overbridge will be constructed to carry non-motorised users
 safey across the junction, but it is considered unlikely that this would present a
 significantly greater collision risk to overflying birds.
- Disturbance and disruption causing birds to move away from the construction area during the working period. During the operation period there is expected to be relatively little change to existing impacts as the scheme has a similar footprint and birds will to an extent have become habituated to current junction conditions including noise and lighting in the winter. Temporary land take during construction would include contractor's compound/plant storage area.
- Changes to water levels and hydrology of wetland areas.

Area A (Laighland)

The scheme affects the south east corner of this area, alongside a wet meadow and impinging upon one of the two ponds alongside the existing M74. There appears to have already been some drainage of the wet meadows, especially in the northern half of Area A.

Area B (Bothwell Pond)

This area is of particular local value to birds. Water rail in this area would be vulnerable to disturbance and would be directly affected if water levels in ponds if levels were to drop significantly.

Area C (Caravan Site)

A slight and temporary impact on the existing screening planting between the A725 and the caravan site will affect dunnock (amber list) and song thrush (red list).

Area D (northern end of SSSI)

Survey data indicate that the impact of the scheme (outwith land take essential to the scheme) is likely to be minimal providing that the remainder of the SSSI is protected and excluded from construction activity and is securely fenced off as part of the construction phase.

Area E

The majority of this area will be unaffected by the scheme with the exception of the young plantation woodland adjacent to the River Clyde by the B7071. No significant impact on wintering birds.

Red list species

Reed Bunting



Most wetland sites with significant breeding populations such as Bothwell Pond often contain individuals which either linger into early December or overwinter, usually in seed-rich habitats. The records at Bothwell during winter 2005-6 appeared to consist of lingering birds which were soon moved on by the first frosts. It is considered that this area is not of any significance with respect to wintering reed bunting. However, studies at similar sites elsewhere has revealed significant numbers of passage birds during September/early October and this appears to have been the case in the past at Bothwell (ringing data unpublished data I. Livingstone). Therefore, as is often the case, a non-breeding season survey covering the autumn passage period may show greater numbers of this species.

Assuming that there will be no encroachment during the construction phase onto the Bothwell Pond area, there will be negligible adverse impact on reed bunting. Work nearby on the flood compensation storage area and ditch running parallel to the A725 will cause no more than a slight adverse localised impact.

Skylark

This species was not recorded during the survey...

Song Thrush

The low (single figure) counts per survey visit appear to reflect the residency of some or all of the breeding pairs and their offspring. Road-kills feature prominently in ringing recovery details concerning this species. Therefore in areas of traffic there are few if any practicable mitigation measures for this species.

The scheme will have negligible adverse impact on this species. Planting of new areas of native-species scrub as part of ecological and landscape mitigation will benefit this species, however it is recommended that planting the northern edge of the A725 next to Bothwell Pond with screening trees/scrub is avoided so as not to encourage flight lines across the road which could lead to increased road mortality.

Bullfinch

The data suggests that there is a healthy population in the area but the 2005-6 winter was atypical in many areas. Early feedback suggests that a poor berry crop covering a number of tree species has led to greater presence of bullfinch at bird feeders etc and also, from ringing data, perhaps a greater mobility than is usual for this species. It must be emphasised that these observations have exclusively involved birds of the British race and does not refer to data relating to the unprecedented Northern Bullfinch invasion in winter 2004-5. In summary, in a more normal winter with respect to berry crops, a regular presence relating to the single breeding pair would be expected to be the norm at Raith.

House Sparrow and Starling

House Sparrows were recorded in the housing area near Laighland but well away from the proposed scheme. Small numbers of Starling were seen feeding on scraps e.g. in the hotel area. Therefore it is considered that house sparrow and starling will not be adversely affected by this scheme and no special mitigation measures are required.

Amber list species

Black-headed Gull and Common Gull



Almost all the records for the area were birds in high transit to and from Strathclyde Loch. The main impact of roads on gull species occurs where there is either a litter problem or as a result of scavenging on dead mammals, especially rabbit and pheasants. There was no evidence in the survey area of large rabbit and pheasant numbers and no mammal oad kills were seen., Most gull attendance at litter appears to be early morning especially, as in this case, near to a night-time roost. Therefore for these and other species, given the busy nature of the roads, it is recommended that there should be no lay-bys incorporating litter bins in the scheme.

It is considered that gulls will not be adversely affected by this scheme and no special mitigation measures are required.

Dunnock

The average of 12 sightings per visit was limited mainly to areas of scrub. The same comments apply to this species as outlined in relation to song thrush.

Fieldfare and Redwing

These highly mobile winter thrushes (e.g. a redwing seen at Bothwell this winter could be in SE Turkey next winter as evidenced by ringing recoveries) are amber-listed on the basis of the small breeding populations within the British Isles. These species will only be impacted by road schemes if berry laden trees such as ornamental rowans are inappropriately placed with respect to flight-lines and fast moving traffic. The two winter surveys 2004-5 and 2005-6 gave both extremes with respect to berry crops and therefore fieldfare/redwing numbers. Huge numbers were present throughout the British Isles in the 2004-5 winter, but the lack of berries in the 2005-6 winter saw many birds flying straight through to Ireland/Spain etc. during the autumn, or using other food sources such as upland pasture. The vast majority of redwing and fieldfare recorded in 2005-6 were almost certainly the result of displacement from higher ground by cold weather/snow cover.

It is considered that fieldfare and redwing will not be adversely affected by this scheme and no special mitigation measures are required.

Goldcrest

The woodland habitat favoured by this species, which will not be impacted by the proposals, means that goldcrest will not be adversely affected by this scheme and no special mitigation measures are required.

Golden Plover and Lapwing.

Golden plover and lapwing were considered to be feeding at night on the open grassland in the north-east corner of Strathclyde Country Park, therefore well away from roads. These species roost during the day on the jetties at the north end of Strathclyde Loch, well away from any potential impact from the scheme.

It is considered that golden plover and lapwing will not be adversely affected by this scheme and no special mitigation measures are required

Goldeneye

This species is amber-listed with respect to the breeding population, not the wintering birds. It is considered that goldeneye will not be adversely affected by this scheme and no special mitigation measures are required



Greylag

Part of the feral Strathclyde Country Park population entered the survey area on one occasion. It is considered that greylag will not be adversely affected by this scheme and no special mitigation measures are required

Lesser Redpoll

Sporadic sightings of a small transitory flock were recorded around Bothwell Pond. It is considered that golden plover and lapwing will not be adversely affected by this scheme and no special mitigation measures are required. Tree planting (in particular alders or birches) which encourage trans-carriageway flight-lines) should be avoided next to the A735 and Bothwell Pond.

Mistle Thush

This species is probably the thrush least likely to be involved in road kills due to its habit of feeding on open grassland, and perching as high as possible in trees. Transitory flight is on average at a much higher level than other thrush species, therefore reducing the risk of flight-line impacts from road traffic. It is considered that mistle thrush will not be adversely affected by this scheme and no special mitigation measures are required

Dabbling Ducks

Teal, shoveler and gadwall were recorded at various times on the waterbodies. None of the flight-lines adopted suggested any possible impact with the road scheme although noise from the construction phase could lead to reduced use of Bothwell Pond for a temporary period. However the numbers of birds that would potentially be displaced are insignificant and there are a number of alternative waterbodies that they would use, as suggested by their current erratic (and therefore mobile) status.

Whooper swan

There appear to be a small number of winter resident birds frequenting the loch to the west of Hamilton Services and occasionally utilising Strathclyde Loch and perhaps Bothwell Pond. Flocks were seen flying over the Raith roundabout on two occasions. As no significant elevated hazards, such as overhead lines, are to be introduced with the scheme and the elevated pedestrian/cycleway bridge will present a highly visible feature, it is considered that whooper swan will not be adversely affected by this scheme and no special mitigation measures are required.

Water Rail

Water Rails favour habitats typified by the habitat at Bothwell Pond, containing common reed *Phragmites australis* and other wetland plants which grow in standing water, particularly during the nesting season. Wintering birds are less constrained.

Impacts on this species should be negligible with appropriate mitigation measures in place to protect the wetland habitat at Bothwell Pond where water rail are located.



6 MITIGATION

Mitigation will include the creation of new surface water/wetland habitats, including shallow scrapes for breeding/passage/wintering waders.. The proximity of breeding lapwings should ensure that this habitat diversification produces immediate results. The scrapes are likely to be well used by both passage and wintering wader species. Results of recent studies of water rails at Leighton Moss (Lancashire) where the water levels have been raised as a result of bittern conservation measures show this has had a beneficial effect on both breeding and wintering water rails. In consequence these measures are starting to be introduced at other reedbed habitats supporting water rails, eg Heysham Nature Reserve.

The screening planting replacement alongside the caravan site will obviously take time to grow therefore there will be an interim period where the area of breeding habitat will be reduced therefore there will remain an intermediate negative impact resulting in a slight adverse impact assessment on Dunnock and Song Thrush.

As implied from the fact that they were not considered under potential impacts, there are no apparent long term effects of the scheme on flight lines e.g. increasing road kills. Flight line severance is therefore not a significant potential impact.

Direct impacts on habitat areas of most value to wintering birds will be minimised as far as practicable, with construction activity and access routes confined to the footprint of the scheme. Proximate disturbance is not quite as critical in winter as in the breeding season as wintering birds are more mobile and are able to translocate more easily.

At present there is no easy access for the public to most of the wetland areas surveyed (casual dog walkers etc.). Mitigation measures should avoid increasing ease of access to areas that, for birds, benefit most from low levels of disturbance and trampling such as Bothwell Pond.

Planting schemes for will concentrate on native species such as hawthorn with the aim of eventually providing a barrier of impenetrable scrub. The winter bird survey suggested that it would not be advisable to plant scrub at the top of the embankment alongside Bothwell Pond as the central reservation contains trees and shrubs and therefore this might create a flightline corridor across the eastbound carriageway, thereby increasing the potential for road casualties of species such as song thrush and dunnock. Replacement of the screening planting/scrub removed from alongside the caravan site is recommended, including hawthorn and gorse. This is with respect of loss of habitat for dunnock and song thrush.



7 CONCLUSION

Wintering birds are likely to experience low and temporary adverse impacts during the construction phase, but are able to readily move away from disturbance and into suitable alternative habitat in the wider area. The scale of impact is therefore not considered to be significant or permanent. The impact of disturbance is difficult to mitigate other than through timing and phasing of works and avoidance or protection of particularly sensitive areas such as Bothwell Pond. During the operational phase, there will be relatively little change to levels of traffic or human disturbance compared to the existing situation (to which wintering birds are already habituated).

There is a risk of significant adverse impact on birds if the scheme and its construction causes a reduction in surface water wetlands due to changes in drainage or drawdown of the water table, in particular at Bothwell Pond. Mitigation measures to avoid adverse impacts will be required to maintain surface water levels.

Wader scrapes are recommended as mitigation and local habitat enhancement.



8 REFERENCES

Direct communication with relevant BTO/RSPB specialists.

Steve Holloway was contacted with respect to quantified data on flight lines and road kills.

John Calladine was contacted re farmland birds and other passerines in Scotland.

Gary Woodburn was contacted re wader scrapes.

Wildlife and Countryside Act 1981

Websites describing the legislation regarding birds:

http://www.jncc.gov.uk/page-1377

http://www.naturenet.net/law/birds.html

Population status of Britain's birds:

http://www.bto.org/psob/index.htm

Guidance in impact assessment:

http://www.webtag.org.uk/

BTO Guide to Birds of Conservation Concern 2002-7

North and South Lanarkshire BAP

Appendix 1 Monthly totals of wintering birds at each site 2005

Area A Laighland	Month	NOVEMBER	DECEMBED	IANUIADY	FEDRUARY
AREA	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
RED LIST SPECIES Bullfinch					
House Sparrow				8	
Reed Bunting				0	
	1	1		1	1
Song Thrush Starling	<u> </u>	26		l	1
Starting		20			ı
AMBER LIST					
SPECIES					
Black-headed Gull					
Common Gull					
Dunnock		3	2	2	4
Fieldfare			4	6	
Gadwall					
Goldcrest				1	
Golden Plover					
Goldeneye					
Greylag Goose					
Grey Wagtail			1		
Herring Gull					
Lapwing					
Lesser BB Gull					
Lesser Redpoll	3			2	
Mistle Thrush			2	1	
Mute Swan					
Redwing	29	1			
Shoveler					
Snipe					
Teal					
Whooper Swan	2	2			
Water Rail					
GREEN LIST					
SPECIES					
Blackbird		2	1	1	1
Blue Tit	2	2	1	6	8
Buzzard					
Canada Goose					
Carrion Crow		_	1	1	
Chaffinch		5	2	27	4
Chiffchaff			_	_	
Coal Tit			1	2	
Coot	2		1		
Cormorant			_	_	
Goldfinch			1	3	
Goosander					
Great S.Woodpecker		_	_		
Great Tit	4	5	1		3
Greenfinch			1		1
Grey Heron				1	
Jackdaw					
Jay					
Little Grebe					
Long-tailed Tit	6	12			2

Magpie	1	2			2
Mallard			8	5	
Moorhen					
Pheasant					
Pied Wagtail		1			
Robin	8	6	2	1	12
Rook			1		
Siskin			5		10
Sparrowhawk					
Treecreeper					
Tufted Duck					
Woodpigeon	2	4		3	25
Wren	5	3	2	1	
Waxwing					

Bothwell	Month				
AREA	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
RED LIST SPECIES					
Bullfinch	2		1		
House Sparrow		4			
Reed Bunting		1	2		
Song Thrush	1	2			1
Starling					
AMBER LIST					
SPECIES					
Black-headed Gull			2	2	
Common Gull					
Dunnock	4	5	7	3	2
Fieldfare	6	3			
Gadwall	4				
Goldcrest	1				1
Golden Plover					
Goldeneye					
Greylag Goose					
Grey Wagtail					
Herring Gull					
Lapwing					
Lesser BB Gull					
Lesser Redpoll	2			1	6
Mistle Thrush					
Mute Swan		2	2	2	
Redwing	149		2	11	
Shoveler	20				
Snipe	2	6	3	1	8
Teal			3		
Whooper Swan					
Water Rail				3	
GREEN LIST					
SPECIES					
Blackbird	1	2	4	1	1
Blue Tit	9	8	1	1	2
Buzzard	2	2	1	1	1
Canada Goose					
Carrion Crow					3
Chaffinch	1				2
Chiffchaff					

Coal Tit					
Coot	3	16	4	3	7
Cormorant					
Goldfinch	3	1	1	1	
Goosander					
Great S.Woodpecker					
Great Tit	9	2	1	2	2
Greenfinch					2
Grey Heron					
Jackdaw					
Jay					
Little Grebe	1		1		1
Long-tailed Tit	18	7	2		2
Magpie	1		1		
Mallard	2		4	3	2
Moorhen		3			
Pheasant					
Pied Wagtail					
Robin	2	2	2	3	3
Rook			6	1	
Siskin	5	1	3		
Sparrowhawk					
Treecreeper					
Tufted Duck					
Woodpigeon	20	1	2		1
Wren	5	4	5	6	1
Waxwing					

AREA C Caravan/camp site	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
RED LIST SPECIES					
Bullfinch					
House Sparrow					
Reed Bunting					
Song Thrush	1		1	1	
Starling					
AMBER LIST SPECIES		-	-		
Black-headed Gull					
Common Gull					
Dunnock	2	1	2		
Fieldfare			2	6	8
Gadwall					
Goldcrest					
Golden Plover					
Goldeneye					
Greylag Goose					
Grey Wagtail					
Herring Gull					
Lapwing					
Lesser BB Gull		1			
Lesser Redpoll					
Mistle Thrush			1		1
Mute Swan					
Redwing	14	1	5		2

Shoveler					
Snipe					
Teal					
Whooper Swan					
Water Rail					
			1		
GREEN LIST					
SPECIES					
Blackbird	8	7	6		5
Blue Tit		5	6	2	2
Buzzard			-		
Canada Goose					
Carrion Crow					
Chaffinch	9	1	6		2
Chiffchaff	-		-		
Coal Tit		2		1	
Coot					
Cormorant					
Goldfinch				2	
Goosander					
Great S.Woodpecker					
Great Tit		2			1
Greenfinch	8			1	
Grey Heron					
Jackdaw					4
Jay			2		
Little Grebe					
Long-tailed Tit		6	8	2	2
Magpie	2	3	4	1	
Mallard					
Moorhen					
Pheasant					
Pied Wagtail					
Robin	6	4		1	3
Rook					
Siskin	1	2			
Sparrowhawk					
Treecreeper	1		1		
Tufted Duck					
Woodpigeon	5				
Wren	6	2	2		2
Waxwing					

	Month				
AREA D SSSI	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
RED LIST SPECIES					
Bullfinch				1	
House Sparrow					
Reed Bunting					
Song Thrush	3	4	1		
Starling					
AMBER LIST					
SPECIES					
Black-headed Gull					
Common Gull					

Dunnock	1	3	2	2	4
	ı	3			4
Fieldfare					
Gadwall		_		_	_
Goldcrest		1		4	1
Golden Plover					
Goldeneye					
Greylag Goose					
Grey Wagtail					
Herring Gull					
Lapwing					
Lesser BB Gull					
Lesser Redpoll					
Mistle Thrush		2			
Mute Swan		_			
Redwing	53	11		1	3
Shoveler	33	11			3
Snipe					
Teal					
Whooper Swan		3			
Water Rail					
GREEN LIST					
SPECIES					
Blackbird	5	8	6	2	7
Blue Tit	10	2	5	1	
Buzzard	1		1	1	1
Canada Goose					
Carrion Crow					
Chaffinch	3	10			
Chiffchaff					
Coal Tit		2			
Coot					
Cormorant					
Goldfinch			3		
			<u> </u>		
Goosander					
Great S.Woodpecker					
Great Tit	1	3	4	1	1
Greenfinch					
Grey Heron					
Jackdaw					
Jay					
Little Grebe					
Long-tailed Tit	14	6			2
Magpie					3
Mallard					
Moorhen					
Pheasant	1			2	
Pied Wagtail				_	
Robin	1	8	2	2	4
Rook	•		_	_	
Siskin					
Sparrowhawk	1				
Treecreeper	1				
Tufted Duck			4		
Woodpigeon	5	_	1	_	_
Wren	3	2	4	2	3
Waxwing					

Bultfinch Goldfinch Bultfinch Bult	AREA E Rest of area	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
House Sparrow Reed Bunting Song Thrush 1	RED LIST SPECIES			T		
Reed Buntung Song Thrush 1			О		2	
Song Thrush Starling A Starling A Starling A S S						
Siarling		4		4		
## AMBER LIST SPECIES Black-headed Gull				-		
SPECIES Black-headed Gull 162 86 5 26 43 43 Common Gull 1 1 1 8 8	Stanling	4) 3		
Common Gull						
Dunnock 3	Black-headed Gull	162	86	5	26	43
Fieldfare		-	1			
Gadwall Goldcrest 5		3			3	
Golderest Golden Plover 46 28 89 Golden Plover 46 28 89 Goldeneye 12 1 6 6 6 6 6 6 6 6 6				2		
Golden Plover						
Coldeneye 12					1	
Greylag Goose 26 3 3 3 3 3 3 3 3 3			28	89		
Crey Wagtail		12			1	6
Crey Wagtail	Greylag Goose			26		
Lesser BB Gull Lesser Redpoll Mistle Thrush 3	Grey Wagtail		1	2		
Lesser BB Gull Lesser Redpoll Mistle Thrush 3			1			
Lesser Redpoll Mistle Thrush 3	Lapwing	82	99	19		
Mistle Thrush 3 Mute Swan 2 2 7 4 Redwing 5 1 1 Shoveler 5 1 1 Snipe	Lesser BB Gull					
Mute Swan 2 2 7 4 Redwing 5 1 1 Shoveler 3nipe 2 6 9 26 Whooper Swan Water Rail 8 2 6 9 26 GREEN LIST SPECIES Blackbird 1 8 8 8 8 8 8 8 8 9 26 9 26 26 9 26 26 9 26 26 9 26 26 26 9 26 26 28 26 28 26 28 26 28<	Lesser Redpoll					
Redwing					3	
Shoveler	Mute Swan	2	2	7	4	
Shoveler				5	1	1
Teal 2 6 9 26						
Teal 2 6 9 26	Snipe					
Water Rail GREEN LIST SPECIES Blackbird 1 8 Blue Tit 2 1 6 1 Buzzard 0 10 0			2	6	9	26
Water Rail GREEN LIST SPECIES Blackbird 1 8 Blue Tit 2 1 6 1 Buzzard 0 10 0	Whooper Swan					
SPECIES Blackbird 1 8 Blue Tit 2 1 6 1 Buzzard						
SPECIES Blackbird 1 8 Blue Tit 2 1 6 1 Buzzard			1	1		
Blackbird 1 8 Blue Tit 2 1 6 1 Buzzard 3 1 10 1 Canada Goose 4 10 1 1 1 Carrion Crow 3 1<	GREEN LIST					
Blue Tit 2 1 6 1 Buzzard 3 10 10 Carrion Crow 3 1 1 Chaffinch 2 2 1 Chiffchaff 3 1 1 Coot 1 1 1 Cormorant 2 41 2 1 Goosander 3 3 3 Great S.Woodpecker 1 3 1 Great Tit 3 1 3 1 Greenfinch 4 4 6 Grey Heron 2 4 4	SPECIES					
Buzzard 10 Canada Goose 4 10 Carrion Crow 3 1 1 Chaffinch 2 2 1 Chiffchaff 3 1 1 Coal Tit 4 2 1 Cormorant 2 41 2 1 Goldfinch 3 3 3 Goosander 1 1 1 Great S.Woodpecker 1 3 1 Great Tit 3 1 3 1 Greenfinch 4 4 2					!	
Canada Goose 4 10 Carrion Crow 3 1 Chaffinch 2 2 Chiffchaff 3 1 Coal Tit 1 1 Cormorant 2 41 2 1 Goldfinch 3 3 3 Goosander 1 5 1 Great S.Woodpecker 1 3 1 Great Tit 3 1 3 1 Greenfinch 4 4 2		2	1	6	1	
Carrion Crow 3 1 1 Chaffinch 2 1 Chiffchaff 3 1 Coal Tit 1 1 Coot 1 2 1 Cormorant 2 41 2 1 Goldfinch 3 3 3 Goosander 1 5 1 Great S.Woodpecker 1 3 1 Great Tit 3 1 3 1 Greenfinch 4 4 6 Grey Heron 2 2 4 4	Buzzard					
Chaffinch 2 2 1 Chiffchaff Coal Tit Coot 1 Cormorant 2 41 2 1 Goldfinch 3 3 3 Goosander 1 Great S.Woodpecker 1 Great Tit 3 1 3 1 Greenfinch 4 Grey Heron 2	Canada Goose			10		
Chiffchaff 1 Coot 1 Cormorant 2 41 2 1 Goldfinch 3 3 3 Goosander 1 5 1 1 Great S.Woodpecker 1 3 1 1 Great Tit 3 1 3 1 Greenfinch 4 4 6 Grey Heron 2 2 4 3			1		!	
Coal Tit 1 Coot 1 Cormorant 2 41 2 1 Goldfinch 3 3 3 Goosander 1 5 1 1 Great S.Woodpecker 1		2		2	1	
Coot 1 Cormorant 2 41 2 1 Goldfinch 3 3 3 Goosander 1 4 4 Great S.Woodpecker 1 3 1 3 1 Great Tit 3 1 3 1 3 1 Greenfinch 4 4 4 4 4 Grey Heron 2 2	Chiffchaff					
Cormorant 2 41 2 1 Goldfinch 3 3 Goosander 1 3 3 Great S.Woodpecker 1 4 3 1 Great Tit 3 1 3 1 3 1 Greenfinch 4 4 4 4 6 7 6 6 6 7 6 6 7 6 7	Coal Tit					1
Goldfinch 3 3 Goosander 1 3 Great S.Woodpecker 1 3 Great Tit 3 1 3 1 Greenfinch 4 4 4 Grey Heron 2 2	Coot		1			
Goosander 1 Great S.Woodpecker 1 Great Tit 3 1 Greenfinch 4 Grey Heron 2		2				1
Great S.Woodpecker 1 Great Tit 3 1 3 1 Greenfinch 4 4 4 4 6 Grey Heron 2 2 4 <td>Goldfinch</td> <td></td> <td></td> <td>3</td> <td>3</td> <td></td>	Goldfinch			3	3	
Great Tit 3 1 3 1 Greenfinch 4 4 2				1		
Greenfinch 4 Grey Heron 2	Great S.Woodpecker				1	
Greenfinch 4 Grey Heron 2	Great Tit	3	1	3	1	
Grey Heron 2				4		
						2
Jackdaw 1	Jackdaw		1			
Jay						

Little Grebe	l				
Long-tailed Tit			20	2	
Magpie	1	2	7	3	1
Mallard		5	20	52	
Moorhen		1	6		
Pheasant					
Pied Wagtail					
Robin	1	1	8	3	1
Rook		1	1		
Siskin			10		
Sparrowhawk					
Treecreeper			1		
Tufted Duck	16			6	
Woodpigeon	9		107		
Wren			5		1
Waxwing			4		