SPECIES ACCOUNTS

Key to symbols commonly used in the species accounts.

In headers and footnotes:

Subspecies/Population in brackets with In tables of important sites: international 1% threshold (Appendix 1).

- population size not accurately known
- population too small for meaningful threshold
- where 1% of the national population is < 50 birds, 50 is normally used as a minimum threshold for national importance
- a site regularly holding > 20,000 waterbirds (excluding non-native species) qualifies as internationally important by virtue of absolute numbers
- denotes that a qualifying level different to the national threshold has been used for the purposes of presenting sites in this report

- no data available
- () incomplete count
 - same meaning as used for thresholds
- site was of a lower importance status in the previous five-year period
- site was of a higher importance status in the previous five-year period
- count obtained using different survey methodology from WeBS Core Counts (see table below)

Sources of additional information used in compiling tables of important sites are listed below. Non-WeBS counts are shown in the tables by the number below given in superscript following the count.

- 1 WWT data
- 2 Uist Greylag Goose Management Committee
- 3 SNH data
- 4 Bean Goose Working Group
- 5 WWT studies
- 6 Supplementary daytime counts
- 7 Greenland White-fronted Goose Study Group
- 8 WWT publications
- 9 SOTEAG reports
- 10 WeBS Low Tide Counts
- 11 Roost counts
- 12 Supplementary daytime counts
- 13 Icelandic Goose Census
- 14 Firth of Clyde Eider counts (Chris Waltho)
- 15 R Godfrey (in litt)
- 16 International Swan Census (WWT)
- 17 All-Ireland Light-bellied Brent Goose Census
- 18 WWT unpublished data
- 19 Judith Smith, Gr. Manchester County recorder
- 20 SNH data
- 21 Paul Daw, County recorder for Argyll
- 23 Roost counts
- 24 Supplementary counts
- 26 B McMillan (in litt.)
- 28 BTO/CCW Carmarthen Bay surveys
- 29 WWTC/CCW Carmarthen Bay surveys
- 30 Supplementary data
- 31 Supplementary counts
- 32 RSPB data
- 33 A Stevenson (in litt.)
- 34 WWT UK-breeding Greylag Goose Survey
- 37 W Aspin (in litt.)
- 39 D Tate (in litt.)
- 43 Norman Elkins (Fife Bird Club)
- 46 S.J.Turner, West Midland Bird Club
- 47 Birdguides (www.birdguides.com)
- 49 Norfolk bird report; White-fronted Goose counts
- 50 RSPB Bean Goose counts

Lesser Whistling Duck

Dendrocygna javanica

Escape
Native Range: S & E Asia

One was at Poole Harbour in October; the third year out of the last four that this species

(and presumably that individual) has been seen there

Mute Swan

Cygnus olor

GB max: 23,440 Nov NI max: 1,572 Jan

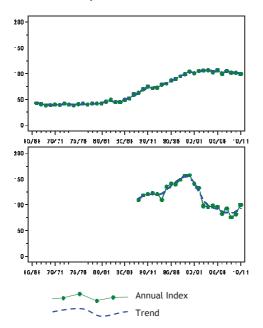


Figure 3.a, Annual indices & trend for Mute Swan in GB (above) & NI (below).

Mute Swans in Britain and Ireland are largely sedentary, and hence the populations are considered separate from both one another and from birds on the Continent (Scott & Rose 1996). Consequently, all sites of national importance in Britain and All-Ireland importance in Northern Ireland are also classed as being of importance internationally.

During the last decade, the annual indices for Mute Swan in Britain have shown little in the way of variation. In 2010/11, the peak WeBS site count of Mute Swans was 951, recorded at both Loughs Neagh & Beg and Somerset Levels. At the latter site, this was the lowest count since 2003/04 and a notable contrast to the maximum recorded there just two years previously.



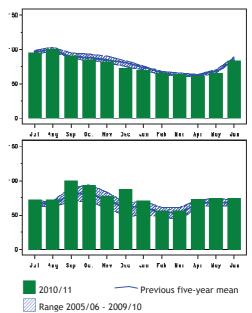


Figure 3.b, Monthly indices for Mute Swan in GB (above) & NI (below).

Elsewhere in south-west England, the peak at Fleet & Wey failed to reach the 1,000 mark for the fourth year in succession. Among the other principal sites for this species, the maximum recorded at Rutland Water was the highest ever and that at Abberton Reservoir was the most for 11 years.

In Northern Ireland, the December peak at Upper Lough Erne proved to be a site record, contributing to a small rise in the national index. The peak at Strangford Lough, the most important site in Northern Ireland for the species in terms of absolute numbers, was the highest there for three years.

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the	e UK						
Somerset Levels	1,164	1,098	1,252	1,174	951	Nov	1,128
Fleet and Wey	1,013	867	990	897	922	Oct	938
Loughs Neagh and Beg	770	1,012	702	898	951	Sep	867
Ouse Washes	508 ⁶	1,151	(1,010)	625 ⁶	437	Mar	746
Rutland Water	588	499	562	555	637	Aug	568
Stour Estuary	347	544	512	632	575	Sep	522
Loch Leven	542	520	544	434	(428)	Oct	510
Tweed Estuary	583	364	410	632	456	Aug	502
Loch Bee (South Uist)	401	399	605		481	Oct	472
Upper Lough Eme	457	354	351	396	650	Dec	442
Dungeness and Rye Bay	410	476	489	417	358	Jul	430
Severn Estuary	421	477	383	381	334	Dec	399
Abberton Reservoir	(399)	311	348	326	428	Aug	362
Lower Lough Eme	266	311	(149)	(133)	(245)	Jan	289
Strangford Lough	(59)	252	111	221	186	Nov	193
Upper Quoile River	121	144					133
Sites no longer meeting table qualifying	ng levels ir	WeBS-Ye	ar 2010/11				
Humber Estuary	350	266	377	453	115	Nov	312 🔻
Homsea Mere	375	290	155	318 ⁶	196	Jun	267 🔻

Black Swan

Cygnus atratus

Escape

Native Range: Australia

Black Swans were noted at 66 WeBS sites in Britain in 2010/11, including two in Wales and three in Scotland. A monthly maximum of 46 was noted in September. This represents a drop in distribution for the third year in a row, contrasting with the pattern shown by Bird Atlas

2007-11 (D. Balmer, pers. comm.). The majority of WeBS records were of singles or pairs but maxima of six were at Abberton Reservoir (Jul) and seven at Stour Estuary (Sep). Given the proximity of these sites, it is possible that the same birds were involved.

Si	tes	with	4	or	more	birds	during	2010/11
----	-----	------	---	----	------	-------	--------	---------

Stour Estuary	7, Sep
Abberton Reservoir	6, Jul
Fleet and Wey	5, Jul

Ramsbury Lake 5, Nov Rochester Pools 5, Nov

Bewick's Swan

Cygnus columbianus

 GB max:
 6,490
 Feb

 NI max:
 0
 8

 % young:
 10.8
 Broom

010.8 Brood size: 1.7

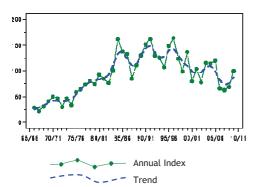
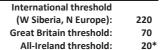


Figure 4.a, Annual indices & trend for Bewick's Swan in GB.



*50 is normally used as a minimum threshold

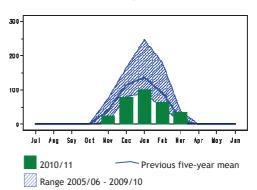
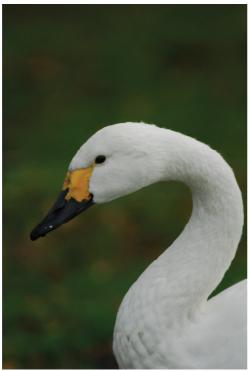


Figure 4.b, Monthly indices for Bewick's Swan in GB.

Bewick's Swans breed in the northern Russian tundra and winter primarily in Britain and The Netherlands. The most recent census of the British wintering population, coordinated by WWT as part of the International Swan Census, was undertaken during winter 2009/10, when the number present was estimated to be 7,000 birds (C. Hall, pers. comm.).



Neil Calbrade

In 2010/11, the WeBS index rose compared to the last three years, indicative of a response to the cold winter. In the last two decades the British trend has fluctuated downwards, and over the same period declining numbers have also been noted in Ireland (Boland & Crowe 2012) and at key wintering sites in the north of

the Netherlands (Hornman *et al.* 2011). These international declines have led to this amberlisted species (Eaton *et al.* 2009) being the focus of dedicated conservation initiatives (Rees & Beekman 2010).

An increasing proportion of Bewick's Swans that winter in the UK are now concentrated in the fenlands in eastern England. Whereas peak counts at most sites across the UK have declined in recent years, those at the two principal sites of Ouse Washes and Nene Washes have remained stable or increased. At both of these locations, the birds use wetlands for roosting and agricultural fields for diurnal foraging. In 2010/11, the peaks logged during fenland roost counts were 6,176 (Feb) at Ouse Washes and 418 (Dec) at Nene Washes. The high number present at Ouse Washes was possibly due to a shift of birds from The Netherlands in response to the coldest winter in north-west Europe for 35 years (M. Hornman, pers. comm.).

Elsewhere, the peaks reported from Severn Estuary (311, Jan), Dee Estuary (92, Jan) and Somerset Levels (63, Feb) all represented the most at those sites for several years, and were also indicative of a cold weather response. The latter site, with a historic peak of 452 swans in January 1982, was traditionally one of the most favoured sites in Britain for this species before experiencing sharp declines during the 1980s and 1990s.

Breeding success was assessed at three wintering sites in the UK during 2010/11; WWT Slimbridge, WWT Martin Mere/Ribble Estuary, and Ouse Washes. Across these three sites the proportion of young birds was 10.8%, slightly lower than the previous ten-year average and therefore an indication of relatively poor breeding success in 2010. Mean brood size was typical of recent years, at 1.7 young per pair (Newth 2011a).

	06/07	07/08	08/09	09/10	10/11	Mon	Mean			
Sites of international importance in the	UK									
Ouse Washes	3,407 ¹¹	5,341 ¹¹	3,468 ¹¹	5,109 ¹¹	6,176 ¹¹	Feb	4,700			
Nene Washes	703 11	642 11	305 11	962 11	418 11	Dec	606			
Severn Estuary	196	180	238	303	311	Jan	246			
Sites of national importance in Great Britain										
Ranworth and Cockshoot Broads					(116)	Dec	(116)			
Dungeness and Rye Bay	130	127	83	99	(100)	Dec	110			
Breydon Water and Berney Marshes	147 ¹¹	87 ¹²	5	131 ¹²	38 12	Mar	82			
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain										
Dee Estuary (England and Wales)	48	82	56	55	92	Jan	67			

Whooper Swan

Cygnus cygnus

GB max: 9,700 Feb NI max: 2,614 Jan

% young: 14.4 Brood size 2.1

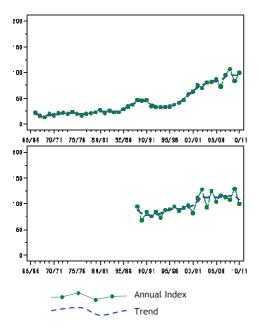


Figure 5.a, Annual indices & trend for Whooper Swan in GB (above) & NI (below).

The number of Whooper Swans wintering in Britain and Ireland has increased steadily over the course of the last 25 years. Almost all originate from the increasing population breeding in Iceland, and a small number of Scandinavian birds also winter in eastern England. A census, coordinated by WWT as part of the International Swan Census, was carried out during 2009/10, when the number present in the UK was estimated to be 16,502 birds (Hall et al. in press). This represented an increase of 9.6% compared to the previous estimate from a census in 2004/05.

In 2010/11, the WeBS index for sites in Britain remained at the high level of recent years. The relatively high monthly index values from September to November imply a large and early arrival took place, with numbers counted then slightly reduced during December and January through displacement of birds by the prevailing freezing conditions to uncounted sites. The maximum at the Ouse Washes roost, 7,271 in

International threshold (Iceland population): 270
Great Britain threshold: 110
All-Ireland threshold: 130

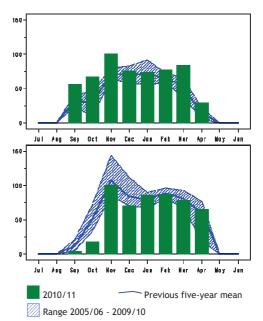


Figure 5.b, Monthly indices for Whooper Swan in GB (above) & NI (below).

February, represents the largest ever total there. Maxima at the other sites of international importance were largely similar to recent years, except for Loch of Strathbeg, where the count of 1,188 in November was a site record; the Core count presumably coinciding with a peak of southbound passage that occurs in northern Scotland in autumn.



Jill Pakenham

Following an increase in the international population estimate (Wetlands International 2012), Solway Estuary and East Fenton Farm Reservoir no longer surpass the threshold for international importance.

In Northern Ireland, the peak at Loughs Neagh & Beg was typical, but at Lough Foyle, where numbers usually peak in October or November, the peak was the lowest ever recorded.

Breeding success was assessed at a number of sites in Britain and Ireland in 2010/11. At the three British sites monitored on an annual basis (Ouse Washes, WWT Caerlaverock, and WWT Martin Mere/Ribble Estuary) the proportion of young birds was 14.4%. This is slightly lower than the previous five-year average and therefore an indication of relatively poor breeding success in 2010. Mean brood size was also slightly less than expected, at 2.1 young per pair (Newth 2011b).

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the U	I K	0.000.11	E 070 11	5 O4 5 16	7 0 74 11		E 040
Ouse Washes	3,756 ¹¹	3,960 ¹¹	5,979 ¹¹	5,615 ¹⁶	7,271 ¹¹	Feb	5,316
Martin Mere and Ribble Estuary	1,451	1,819	1,703	2,296	2,052	Jan	1,864
Loughs Neagh and Beg	1,731	1,734	(1,592)	1,192	1,669	Mar	1,584
Lough Foyle	1,042	1,167	1,240	2,033	506	Feb	1,198
Upper Lough Erne	956	680	636	643	793	Jan	742
Loch of Strathbeg	285	92	252 797 ¹³	182	1,188	Nov	400
Loch Eye	55 216 ¹¹	399 ¹³	797 ¹¹	4	448 450 ¹¹	Oct	341
Nene Washes		110 11		0.57		Nov	310
Loch Leven	220	242	350 ¹²	357	224	Nov	279
Strangford Lough	199	432	251 ¹⁰	183	319	Jan	277
Sites of national importance in Great Brit		(07)	(224)	200	045	N 4	0.57
Solway Estuary	(194)	(97) 340 ¹²	(231)	298	215	Mar	257 ▼
East Fenton Farm Reservoir	143	340	182 200 ¹³	240	150	Dec	211 🔻
Solway Firth - Newton and Border Marsh					400	N.	200
River Earn, Forteviot - Kinkell	400		(5)		198	Nov	198 🔺
Norham West Mains	196	0.4	(50)	200	(0.5)	1	196
Loch Heilen	(197)	84	(59)	300 433 ¹²	(25)	Jan	194 ▼
Lower Teviot Valley	36	98	(129)		404		189
Wigtown Bay	(164)	267	(195)	177	101	Mar	185 ▼
R Clyde: Carstairs to Thankerton	188	173	109	(86)	268	Nov	185
Cromarty Firth	6	19 ¹³	(67)	(331)	335 ¹³	Nov	173 🛋
Dornoch Firth	241	(86)	190	37	222	Oct	173
Wedholme Flow	0	0	19	557 ¹¹	250	Nov	165
River Tweed - Kelso to Coldstream	162	230	252	134	32	Nov	162
Montrose Basin	147	(182)	103	151	224	Mar	161
Black Cart Water (Gryfe-White Cart)	106 ¹²	98 ¹²	207 12	221 ¹²	132	Nov	153
Dalreoch	12		216 ¹³	67 ¹³		_	142
Loch a` Phuill (Tiree)	152 ¹²	103	94	115	184	Dec	130
Lower Derwent Ings	104	88	93	174	151	Mar	122 🔺
Morecambe Bay	(84)	158	82	(118)	(73)	Feb	120
River Eden - Grinsdale to Sandsfield	59	186	108	108	94	Mar	111
Sites no longer meeting table qualifying Rossie Bog	levels in W	eBS-Year 2 99	2 010/2011 (78)	(162) ¹²	67 ¹²	Mar	109
Sites below table qualifying levels but ex	ceeding th	reshold in	WeBS-Year	r 2010/11 iı	n Great B	ritain	
Vasa Loch, Shapinsay	147	85	40	62	130	Dec	93
Mersey Estuary	78	75	52	54	118	Jan	75
Loch Eaval and Loch Hosta (North Uist)	27	16	79	47	117	Nov	57
Loch Insh and Spey Marshes	96	148	97	42	112	Feb	99

Chinese Goose Escape

Anser cygnoides Native Range: E Asia

Chinese Geese (the domestic strain of Swan Goose) were recorded at 11 WeBS sites, with a

monthly maximum of ten birds in January. All records involved one or two birds.

Taiga Bean Goose

Anser fabalis fabalis

GB max: 376 Jan NI max: 0

% young: 31.0 Brood size: 2.1

International threshold
(NE Europe population): 420
Great Britain threshold: 4
All-Ireland threshold: +

There are two regular sites for wintering Taiga Bean Geese (Anser f. fabalis) in the UK; Slamannan Plateau in central Scotland and Yare Valley in Norfolk. Birds are highly faithful to both of these areas, where their numbers are monitored by the Bean Goose Working Group and RSPB, respectively. Unless specifically reported as being of the fabalis race, all other 'bean geese' are assumed to be of the race rossicus (Tundra Bean Goose); similarly, all 'bean geese' reported from the Slamannan and Yare Valley areas are assumed to relate to Taiga Bean Geese.

In 2010/11, a site maximum of 267 Taiga Bean Geese was recorded at Slamannan Plateau in October. This is comparable to recent years and slighty higher than the mean for the previous decade. At Yare Valley however, the peak of 137 in January represented a significant increase compared to the previous year, and may have been associated with a cold weather movement. Further evidence for this is provided by the fact that having arrived relatively late in the winter (in November), the majority had migrated back to the continent by mid February. Monitoring of the Slamannan Plateau population by the Bean Goose Working Group indicated that approximately 31% of the population were first-year birds in 2010/11, an improvement on the previous year (Reed 2011a).

Away from these two key areas, single Taiga Bean Geese were identified at two other sites during Core counts; Humber Estuary (Jan) and Waughton (Feb).

	06/07	07/08	08/09	09/10	10/11 Mon	Mean
Sites of national importance in Great Britain	4	4	4	4	4	
Slamannan Area	255 4	300 4	265 4	260 4	267 ⁴ Oct	269
Middle Yare Marshes	111 ⁵⁰	136 ⁵⁰	133 ⁵⁰	81 ⁵⁰	137 ⁵⁰ Jan	120

Tundra Bean Goose

Anser fabalis rossicus

GB max: 45 Jan NI max: 0 International threshold

(W & C Siberia population): 5,500 Great Britain threshold: 3 All-Ireland threshold: +

Unless submitted otherwise, records of 'bean geese' away from the two key wintering areas of Taiga Bean Goose (Anser f. fabalis) are assumed to relate to Tundra Bean Goose (Anser f. rossicus). Since 2008/09, the two sub-species have been listed separately in the annual WeBS report. Small, but regular, numbers of Tundra Bean Geese are noted during the course of most winters in the UK, primarily at sites in the east. Most records tend to relate to birds in flocks of other geese. However, during periods of cold

weather on the continent influxes of discrete, larger, groups can occur.

Considering that weather-related influxes were noted in The Netherlands (Hornman et al. 2012) and Switzerland (Keller & Műller 2012), a larger arrival of Tundra Bean Geese into the UK might have been expected during the midwinter period of 2010/11. The majority seen during WeBS Core counts were singles, but several small flocks were noted including 12 at North Warren & Thorpeness Mere (Jan-Feb).

Sites with 3 or more birds in 2009/10

Breydon Water & Berney Marshes	17, Jan	Lower Derwent Ings	4, Dec
North Warren & Thorpeness Mere	12, Jan	Alde Complex	4, Jan
Humber Estuary	8, Nov	Swale Estuary	3, Feb
Abberton Reservoir	6. Jan	Achlochan	3, Jan

Pink-footed Goose

Anser brachyrhynchus

International threshold (Greenland/Iceland population): Great Britain threshold:

reat Britain threshold: 3,600 All-Ireland threshold: +

3.500

GB max: 288,798 Oct NI max: 51 Dec

% young: 19.9 Brood size: 2.3

The annual census of Pink-footed Geese is carried out through the Goose & Swan Monitoring Programme, coordinated by WWT. Late 2010 saw counts undertaken in October, November and December, representing the 51st consecutive Icelandic-breeding Goose Census (Mitchell 2011a).

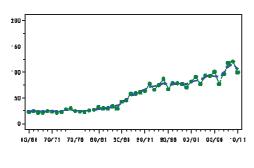




Figure 6.a, Annual indices & trend for Pink-footed Goose in GR

Despite some recent fluctuations in numbers, partly due to variation in coverage, the long-term trend for the species has been one of steady increase. During 2010/11, the population using sites in Britain (including estimates for non-counted sites) was considered to be 297,798 birds, an marked decrease compared to the high of over 360,000 estimated the previous year. Birds were relatively early to arrive in autumn 2010. In September, 32,882 were recorded at Loch of Strathbeg, while by October, a site record peak ofover 65,000 had gathered at Montrose Basin.

Although it is possible that large numbers of Pink-footed Geese may have been in inaccessible and uncounted areas of Iceland during October, there was no marked increase in the overall census totals between October and November. This suggests that the decrease noted between years was real, at least to some extent, and not merely attributable to a late departure from Iceland (Mitchell 2011a).

Typically, Pink-footed Geese shift locations within the UK during the course of the winter. However, the severe weather in December 2010 clearly affected the expected distribution at the start of the midwinter period. For example, the Solway Firth experienced a huge influx of nearly 50,000 geese, as birds escaped the frozen waterbodies and extensive snow cover to the north. Further south, the peak counts in Norfolk where several sites have become increasingly important for this species in recent decades, included 30,000 at Holkham Marshes and 37,350 at Snettisham.



Tommy Holden

The combination of consistent annual breeding success, targeted nature reserve management, and changes in availability of agricultural foraging resources (Fox et al. 2005, Gill et al. 2006) have contributed to the rise of the wintering Pink-footed Goose population in Britain since the mid 1980s. However, with the midwinter periods of 2009/10 and 2010/11 having been particularly harsh (notably so in Scotland), with prolonged snow cover and freezing temperatures, over-winter mortality is likely to have risen in the last two years. We will have to wait to determine the extent to which the overall population size may have been affected by these recent winters.

It is interesting to recall that a recent population model developed using counts and demographic data for Pink-footed Goose (Trinder *et al.* 2005), predicted that the population would reach equilibrium at

approximately 220,000 birds. The same work indicated that there is only a very small chance that numbers would fall below 50,000 by the year 2030.

Breeding success was assessed at several locations throughout Scotland and England. The

proportion of young within flocks was 19.9% and the mean brood size for pairs with young was 2.3, both figures higher than the previous year and the mean of the preceding decade (Mitchell 2011a).

	00/07	07/00	00/00	00/40	40/44		
Sites of international importance in th	06/07 e IIK	07/08	08/09	09/10	10/11	Mon	Mean
Southwest Lancashire	39,030 ¹³	17,877	90.455 ¹³	69,790 ¹³	17,160 ¹³	Nov	46,862
Loch of Strathbeg	37,396	39,370 ¹³	53,454 ¹³	60,626 ¹³	35,000 ¹³	Mar	45,169
Snettisham	33,485 ¹³	47,530 ¹³	51,950 ¹³	28,700 ¹³	37,350 ¹³	Jan	39,803
Holkham Marshes	60,000 ¹³	46,400 ¹³	19,510 ¹³	19,630 ¹³	30.000 ¹³	Jan	35,108
West Water Reservoir	(56,900)	27,960 ¹³	47,361 ¹³	26,400 ¹³	16,650 ¹³	Oct	35,054
Montrose Basin	25,000 ¹³	23,945 ¹³	38,911 ¹³	6,500	65.060 ¹³	Oct	31,883
Aberlady Bay	_0,000	23,415 13	32,244 ¹³	15,721 ¹³	20.622 13	Sep	23,001
Loch of Skene	$(22,930)^{13}$	19,000 ¹³	18,560 ¹³	16,780 ¹³	27,500 ¹³	Nov	20,954
Solway Estuary	23,313 13	5.004	5,751	6,633	50,000 ¹³	Dec	18,140
Breydon Water and Berney Marshes	17,800 ¹¹	22,785 12	21,400 11	14,230 ¹¹	12,250 ¹¹	Jan	17,693
West Freugh	,	,	,	$(16,000)^{12}$	(22)	Feb	(16,000)
Carsebreck and Rhynd Lochs	12,600 ¹³	11,200 ¹³	15,200 ¹³	18,250 ¹³	16,550 ¹³	Oct	14,760
Scolt Head	17,200 ¹³	7,870 ¹³	23,000 13	10,750 ¹³	.0,000	00.	14,705
Findhorn Bay	$(3,800)^{13}$	7,800 ¹³	9,850 ¹³	14,500 ¹³	6,300 ¹³	Oct	9,613
Brow Well	(0,000)	.,000	120 ¹³	124 ¹³	26,570 ¹³	Dec	8,938 🔺
Loch Leven	14,600 ¹³	1,000	17,618 ¹³	4,539	5.168 ¹³	Oct	8,585
Martham Broad	11,000	1,000	8,500 ¹³	1,000	0,100	00.	8,500
Beauly Firth			0,000	12,800 ¹³	3,370 ¹³	Oct	8,085
Wigtown Bay	(6,695)	11,720 ¹³	(4,943)	5,941	6,120	Jan	7,927
Kilconguhar Loch	90	7,010 ¹³	14,000 ¹³	9,540 ¹³	6,730 ¹³	Dec	7,474
Morecambe Bay	(7,145)	3,376	(7,255)	(2,757)	10,689	Oct	7,116
Loch of Lintrathen	7,040 ¹³	8,410 ¹³	10,745 13	3,550 ¹³	5,380 ¹³	Nov	7,025
Priestside	.,	0,	,	0,000	7,000 ¹³	Dec	7,000 🔺
Winter Loch, St Fergus Gas Terminal	6,620 ¹³				1,000	500	6,620
Hule Moss	2,250 ¹³	6,850 ¹³	6,250 ¹³	9,350 ¹³	7,550 ¹³	Nov	6,450
Ythan Estuary and Slains Lochs	1,600	2,000	0,200	10,000	10,970	Oct	6,143
Dupplin Lochs	1,450 ¹³	2,100 ¹³		18,500 ¹³	870 ¹³	Nov	5,730
Middlemuir (New Pitsligo Moss)	1,100	4,500 ¹³	3,500 ¹³	10,000	9,000 ¹³	Oct	5,667
Holme and Thornham	4,000 ¹³	1,000	4,170 ¹³	8,000 ¹³	0,000	00.	5,390
Simonswood Peat Moss	3,000 ¹³	4,500 ¹³	1,110	0,000	8,500 ¹³	Nov	5,333
Horsey Mere	5,430 ¹³	.,000			5,125 ¹³	Dec	5,278
Fala Flow	2,170 ¹³	3,650 ¹³	1,510 ¹³	13,084 ¹³	5,604 ¹³	Oct	5,204
Holme	_,	3,865 ¹³	.,	,	6.500 ¹³	Dec	5,183
Eden Estuary	9	430 ¹³	20,520 11	650 ¹³	3,400 ¹³	Nov	5,002
Lochhill	760	5,000 ¹²	7,100 ¹²	7,000 ¹²	-,		4,965
Wedholme Flow	0	1,300	6,000 ¹²	10,000	7,000	Mar	4,860
Humber Estuary	4,151	3,703	7,108	3,944	4,180	Nov	4,617
Lindisfarne	(6,132)	6,900 ¹³	3,500 ¹³	3,500 ¹³	2,630 ¹³	Oct	4,532
Biggar Moss	0	6,500	7,000	5,555	_,,,,,		4,500
Norton Marsh	6,650 ¹³	4,850 ¹³	2,720 ¹³	2,831 ¹³			4,263
Sites no longer meeting table qualifying							-,
River Tay - Haughs of Kercock	3,702 ¹³	3,165 ¹³	2,704 ¹³	2.500 ¹³	1,308 13	Nov	2,676
Loch Spynie	9,000 ¹³	150 ¹³	1,000 ¹³	[′] 3 ¹³	•		2,538
Forth (Skinflats)	2,950 ¹³	2,176 ¹³	4,463 ¹³	775 ¹³	365 ¹³	Nov	2,146
Sites below table qualifying levels but			in WeBS-Y		in Great E	Britain	•
Munlochy Bay	2,600 ¹³	2,500 ¹³	750 ¹³	3,500 ¹³	5,000 ¹³	Oct	2,870
Ythan Estuary	5,700	2,300	750	(2,110)	4,200	Jan	3,238
Loch Connell		4,500 ¹²	3	(3,000)	4,000	Mar	2,876
Loch Tullybelton	2,700 ¹³	2,800 ¹³	4,000 13	150 ¹³	3,800 13	Nov	2,690

European White-fronted Goose

Anser albifrons albifrons

GB max: 3,087 Jan
NI max: 0
% young: 25.9 Brood size: 2.

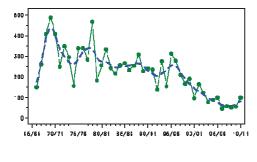




Figure 7.a, Annual indices & trend for European White-fronted Goose in GB.

Much has been written in past WeBS reports about how the steady decline in numbers of wintering European White-fronted Geese in Britain is at least partly attributable to short stopping, in response to milder winter conditions further east in northwestern Europe. This distributional shift in core wintering range has resulted in an associated increase in wintering numbers in The Netherlands (Hornman et al. 2011). In view of this trend, cold weather events might be anticipated to result in an opposing response, and 2010/11 was no exception. A marked influx was noted across eastern England during the frozen conditions that affected much of north-west Europe, yielding a British monthly maximum of 3,087 birds in January 2011.

Although the maximum reported from Severn Estuary (650, Jan) was higher than the recent five-year average, this total was surpassed at two sites in eastern England. The peak aggregations at Alde Compex (779, Jan) and North Warren & Thorpeness Mere (483, Jan) both represent record WeBS counts for those sites, and the count of 758 at Swale Estuary in February is the most there since 1998/99. Historically, the Swale Estuary was used by larger numbers of European White-fronted Geese, exemplified by the regular presence of

International threshold
(NW Siberia/ NE Europe population): 12,000
Great Britain threshold: 24
All-Ireland threshold: +

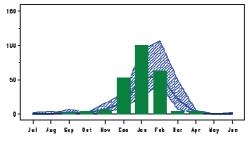




Figure 7.b, Monthly indices for European White-fronted Goose in GB.

1,000+ wintering birds during the 1980s and early 1990s that included a site maximum of 2,550 geese in February 1987. However, as with other formerly important sites, numbers there decreased as short-stopping became more prevalent.

Records were widely distributed across a variety of sites in England during winter 2010/11 (54 in total, compared to an average of 24 sites in the previous five years). As can be seen from the table below, a number of noteworthy flocks were recorded away from traditionally favoured sites during the very cold December to January period. These included groups of 30+ on the south coast of England where the species rarely occurs nowadays.

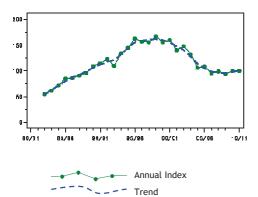
European White-fronted Geese were aged at two sites (WWT Slimbridge and North Warren, Suffolk) during the winter. Overall, 25.9% were first-winter birds, a similar figure to the previous year and indicative of a reasonably productive breeding season compared to the longer-term average. Brood size data were also collected at Slimbridge, and ranged from one to five goslings with an average of 2.3 young per successful pair (Reed 2011b). Notably, in Denmark, brood size in October 2010 was estimated to be somewhat greater, at 3.64 young per successful pair (P. Clausen, pers. comm.).

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of national importance in Great B	ritain	-	_	-	_		
Severn Estuary	542 ⁵	527 ⁵	503 ⁵	676 ⁵	650 ⁵	Jan	580
Swale Estuary	355	315	160	523	758	Feb	422
Heigham Holmes	570 ⁴⁹	800 49	200 49	150 ⁴⁹	230 49	Dec '	390
North Warren and Thorpeness Mere	180	452 ⁶	245	293	483	Jan	331
Alde Complex	0	(58)	206	(7)	779	Jan	328
Dungeness and Rye Bay	151	194	239	388	(0)		243
North Norfolk Coast	200	275	226	96	257	Dec	211
Middle Yare Marshes	66	193	72	90	202	Jan	125
Pegwell Bay	0	118	0	120 ⁶	81 ⁶	Dec	64
Lower Derwent Ings	0	1	0	136	120	Dec	51
Breydon Water and Berney Marshes	0	61 ⁶	0	28 ⁶	155 ⁶	Dec	49
Arun Valley	4	1	(0)	(0)	(102)	Jan	36 🔺
Buckden and Stirtloe Pits			. ,	35 ⁶	, ,		35
Thames Estuary	0	24	17	28	90	Jan	32
Minsmere	0	0	0	0	139	Jan	28 🔺
Hamford Water	1	0	1	0	135	Dec	27 🔺
Sites no longer meeting table qualifying	levels in W	/eBS-Year	2010/2011				
Stodmarsh	0	32	0	0	68	Dec	20
Ouse Washes	7	0	41 ⁶	0	23 ⁶	Jan	14
Sites below table qualifying levels but e	exceeding th	reshold in	WeBS-Yea	r 2010/11 i	n Great E	Britain	
Stodmarsh	0	32	0	0	68	Dec	20
Crouch-Roach Estuary	0	1	0	0	58	Dec	12
Humber Estuary	0	0	0	3	56	Feb	12
Cuckmere Estuary	0	0	0	0	35	Jan	7
Dingle Marshes and Walberswick NNR	0	0	0	0	35	Jan	7
North West Solent	1	0	0	0	34	Jan	7
Otmoor	(0)	(5)	0	14 ⁶	29	Jan	14
Cotswold Water Park (East)	`o´	`o´	0	0	28	Feb	6
The Wash	2	0	0	0	25	Dec	5

Greenland White-fronted Goose

Anser albifrons flavirostris

GB max: 13,269 Dec NI max: 68 Jan % young: 22.9 Brood size:



3.1

Figure 8.a, Annual indices & trend for Greenland White-fronted Goose in GB.

Greenland White-fronted Geese breed in the low arctic coastal fringe of west Greenland, and migrate southwards through south and west Iceland during September and October. The species then winters exclusively in Britain and

(Greenland population): 240
Great Britain threshold: 130
All-Ireland threshold: 110

International threshold

Ireland, favoured locations being Islay on the west coast of Scotland and Wexford Slobs in Ireland.

2010/11 represented a year of stability for the UK's internationally important population of wintering Greenland White-fronted Geese, which as well as being Red-listed in the UK (Eaton et al. 2009) also qualifies as 'Endangered' under IUCN criteria (Birdlife International 2012). The two years since the low point in 2008/09 have seen a slight improvement in the national index and it would appear that the steep decline which characterised the period of 1998/99 to 2006/07 has come to an end. A ban on hunting in Iceland has probably helped to enable numbers to stabilise in recent years. Previously, hunting pressure had represented unsustainable source of mortality combination with a long period of low productivity - considered responsible for the decline noted since mid 1990s (Fox et al. 2012).

The annual census organised by the Greenland White-fronted Goose Study Group, was carried out in December 2010 and March 2011. The peak of 13,269 geese in December represents an increase of 6.1% compared to the maximum recorded in 2009/10. Typically, over half of the Scottish population was on Islay, while the peak count from the most southerly wintering site in Britain, the Dyfi Estuary, was slightly lower than recent years.

The percentage of young on Islay (22.9%) was the highest for 25 years and the fourth highest since records began in 1962. Mean brood size of 3.05 also implies a successful breeding season. The spring of 2010 was exceptionally mild and snow-free in west Greenland, so geese arrived to good feeding conditions. Warm temperatures persisted through the summer and probably also contributed to high productivity (Fox *et al.* 2012).

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the UK							
Island of Islay	7,902 ⁵	7,980 ⁵	8,590 ⁵	7,262 ⁵	8,027 ⁵	Jan	7,952
Machrihanish	1,716 ⁵	1,285 ¹¹	1,477 5	2,180 5	1,866 ⁵	Mar	1,705
Rhunahaorine	940 ⁵	1,451 ⁵	879 ⁵	1,017 ⁵	961 ⁵	Dec	1,050
Tiree	974 ⁵	803 ⁵	979 ⁵	787 ⁵	898 ⁵	Nov	888
Isle of Coll	687 ⁵	445 ⁵	336 ⁵	284 5	301 ⁵		411
West Freugh/Stranraer Lochs	360 ⁵	247 ⁵	273 ⁵	350 ¹⁰	470 ⁵	Jan	340
Sound of Gigha	105 ⁵	194 ⁵	330	337 ⁵	679	Mar	329 🔺
Isle of Lismore	273 ⁵	240 ⁵	280 ⁵	300 ⁵	245 ⁵	Mar	268
Keills Peninsula and Isle of Danna	300 ⁵	202 5	239 ⁵	214 ⁵	259 ⁵		243 🔺
Sites of national importance in Great Britain	1						
Bute	209 ⁵	240 ⁵	210 ⁵	215 ⁵	230 ⁵	Nov	221
Loch Lomond	210 ⁵	223 ¹¹	220 ⁵	200 ⁵	210 ¹¹	Nov	213
Clachan and Whitehouse	186 ⁵	120 ⁵	170 ⁵	182 ⁵	359 ⁵	Jan	203
Loch Ken	206 ⁵	177 ⁵	194 ⁵	186 ⁵	203 ⁵	Feb	193
Westfield Marshes	155 ⁵	173 ⁵	176 ⁵		180 ⁵	Nov	171
Loch of Mey	176 ⁵	146 ⁵	240 ⁵	170 ⁵	118 ⁵	Mar	170
South Uist: Loch Bee/Kilaulay	160 ⁵	184 ⁵	150 ⁵	123 ⁵	100 ⁵	Nov	143
Sites no longer meeting table qualifying lev	els in WeE	3S-Year 20	10/2011				
Loch Gorm				14	145	Nov	80
Sites below table qualifying levels but exce	eding thre	shold in W	eBS-Year	2010/11 ir	Great B	ritain	
Loch Gorm	_			14	145	Nov	80

Lesser White-fronted Goose

Anser erythropus

Vagrant and escape Native Range: SE Europe, Asia

Presumed escapes were seen at four sites in 2010/11, including a long-stayer throughout

much of the year at Llyn Traffwll and two at Saltfleet (Oct-Nov).

Greylag Goose (Icelandic)

Anser anser

GB max: 104,450 Nov
NI max: 0**
% young: 22.4 Brood size: 2.1

International threshold (Iceland population): 980
Great Britain threshold: 850
All-Ireland threshold: 50

**small numbers remain difficult to distinguish from resident birds

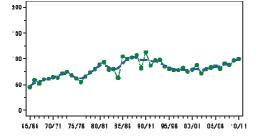




Figure 9.a, Annual indices & trend for Icelandic Greylag Goose in GB.

Counts of Icelandic Greylag Goose were undertaken in late 2010 as part of the 51st consecutive Icelandic-breeding Goose Census (IGC), coordinated by WWT. This census incorporates monitoring of sites in Britain, Ireland, the Faeroes, Norway and Iceland.



Howard Lacey

Following adjustments for the presence of birds from other populations and the addition of estimated counts, a total population estimate of 110,662 geese was derived from the higher November total (Mitchell *et al.* 2011). This includes 16,000 in Iceland and small numbers elsewhere, but represents an overall increase of 1.1% compared to the previous year. Trinder *et al.* (2010) analysed IGC data from the last 15

years, the time in which the majority of Iceland Greylag Geese began wintering on Orkney. This shift in winter distribution has probably meant that fewer Greylag Geese are being shot in Britain, as there are fewer wildfowlers on Orkney than other parts of Scotland. Despite a large annual harvest in Iceland, a presumed reduction in the number shot in other parts of the winter range combined with relatively high breeding success in recent years has probably been sufficient to reverse the decline noted in this population during the 1990s.

During early November, birds were aged at several localities across northern Scotland. Breeding success was similar to the recent average, with flocks containing 22.4% young and a mean brood size of 2.1 young per successful pair (Mitchell 2011a).

It should be stated that there is an increasing number of British Greylag Geese present in Scotland, with Mitchell *et al.* (2011) estimating there to be c. 47,400 British Greylag Geese in Scotland in the summers of 2008 and 2009. With large concentrations in Orkney (c. 10,000) and Shetland (c. 5,000), where Iceland Greylag Geese are known to winter, separating the two populations for monitoring continues to be a challenge.

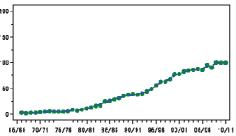
	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the U	IK						
Orkney	55,521 ¹³	67,540 ¹³	68,349 ¹³	69,519 ¹³	80,744 ¹³	Dec	68,334
Loch Leven	620	700	1,195 ¹³	18,573 ¹³	(1,364)	Jul	5,272
Bute	1,670 ¹³	1,960 ¹³	3,800 ¹³	2,550 ¹³	8,010 ¹³	Dec	3,598
Dornoch Firth	2,858	3,310 ¹³	6,379	1,825	3,596 ¹³	Nov	3,594
Strathearn (West)	3,170 ¹³	1,400 ¹³					2,285
Cromarty Firth	832 ¹³	5,268 ¹³	992	2,501 ¹³	914 ¹³		2,101
Loch Fleet Complex	1,762	2,100 ¹³	1,110 ¹³	2,143	2,255 ¹³	Nov	1,874
Inner Firth of Tay	157 ¹³	636 ¹³	2,640 ¹³	1,943 ¹³			1,344
West Freugh				1,000 ⁶			1,000
Sites of national importance in the UK							
Gadloch	1,100 ¹³	600	1,990	785	401	Oct	975
Forth Estuary	(471)	875	936 ¹³	(783)	1,101	Sep	971
Island of Westray	1,030 ¹³	735 ¹³					883
Sites no longer meeting table qualifying	levels in We	BS-Year 2	010/2011				
Mill Dam & Balfour Mains Pools	676	1,095	850	374	580	Feb	715
Loch of Skene	$(500)^{13}$	520 ¹³	790 ¹³	760 ¹³	530 ¹³	Nov	650
Sites below table qualifying levels but ex		reshold in \		2010/11 in	Great Bri	tain	
Montrose Basin	250 ¹³	226	161 ¹³	275	2,519	Jan	686
Loch Ryan	1	92	0	301 ⁶	1,484	Dec	376
Loch of Spiggie	344 ¹³	625	443	630	940	Oct	596

Greylag Goose (British/Irish)

Anser anser

GB max: 39,448 Oct NI max: 2,010 Mar % young: 27.5* Brood size: 3.2* Pooled 're-established' and 'NW Scotland' populations Great Britain threshold: 1,400 $^{^{\dagger}}$ All-Ireland threshold: ? $^{^{\dagger}}$

*NW Scotland only



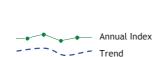


Figure 10.a, Annual indices & trendfor British/Irish Greylag Goose

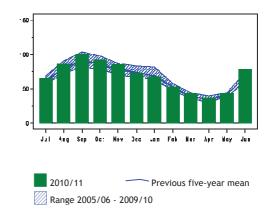


Figure 10.b, Monthly indices for British/Irish Greylag Goose

British/Irish Greylag Goose, listed as such in the annual WeBS report since 2009/10, refers to a combination of the populations previously referred to as 're-established' and 'North West Scotland' Greylag Geese. As these populations have spread towards each other in Scotland, it is no longer possible to make a clear distinction between them (Mitchell *et al.* 2010, 2012). Until such time that the British population of Greylag Goose is recognised internationally, sites will be here as surpassing the threshold for national importance only.

The annual index for resident Greylag Goose at WeBS sites is now showing signs of having reached stability, whereas the breeding

population in the wider countryside continues to increase (Baillie *et al.* 2012). During WeBS Core counts, the largest aggregations were noted during the post-breeding period when birds form moulting flocks. Following the change in the classification of resident Greylag Geese in Britain, six sites continue to surpass the revised threshold for national importance (Musgrove *et al.* 2011). These include Nosterfield Gravel Pits, Lower Derwent Ings and North Norfolk Coast in England, and Tiree and the Uists in Scotland. Numbers have declined on Tiree and the Uists due to an increase in the number of birds shot under licence (Mitchell 2011b).

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of national importance in Great Brita							
Tiree	$4,005^{32}$	$3,694^{32}$	3,370 ³²	2,848 ³²	2,639 ³²	Aug	3,311
Nosterfield Gravel Pits	1,898	2,819	1,953	3,885	2,024	Aug	2,516
North Uist	2,318 ³⁴	2,294 ³⁴	2,783 ³⁴	2,488 ³⁴	2,150 ³⁴	Aug	2,406
South Uist	1,719 ³⁴	1,141 ³⁴	1,971 ³⁴	2,482 ³⁴	1,661 ³⁴	Aug	1,795
Lower Derwent Ings	1,780	1,056	1,472	2,468	1,980	Dec	1,751
North Norfolk Coast	1,725	1,270	2,203	1,159	1,859	Aug	1,643
Other sites with mean peak counts of 800	+ birds in G	Freat Britai	\mathbf{n}^{\dagger}				
King's Dyke Pits, Whittlesey	1,338	(0)	(90)	(46)	(12)	Mar	1,338
The Wash	1,337	1,159	1,200	1,291	1,362	Jun	1,270
Humber Estuary	(785)	(906)	945	1,401	(1,111)	Nov	1,173
Point of Ayre Gravel Pit	900	1,165	1,630	1,250	56	Jul	1,000
Tophill Low Reservoirs	1,190	1,230	1,000 ⁶	(890)	474	Oct	974
Ouse Washes	810	687 ⁶	1,496	1,061	750	Oct	961
Dungeness and Rye Bay	773	1,409	964	740	787	Aug	935
Hay-a-Park Gravel Pits	825	1,503	606	1,007	720	Sep	932

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Livermere and Ampton Water		1,285	784	642			904
Windermere	985	767	843	1,184	586	Jun	873
Bolton-on-Swale Gravel Pits	615	1,585	716	732	630	Dec	856
Morecambe Bay	(617)	(585)	1,139	538	861	Nov	846
Sutton and Lound Gravel Pits	494	563	1,095	868	1,131	Aug	830
Alton Water	1,056	1,068	613	807	555	Oct	820
Sites with mean peak counts of 50+ birds in Northern Ireland [⊺]							
Loughs Neagh and Beg	662	1,284	(917)	1,294	726	Mar	992
Lough Foyle	974	716	750	194	1,184	Mar	764
Strangford Lough	277 ⁵	431	513	462	520	Nov	441
Belfast Lough	196 ⁵	134	86	87	90	Dec	119
Tullyratty Lake	213	5					109
Lower Lough Erne	140	38	(14)	(30)	(12)	Jan	89
Clea Lakes					78	Nov	78
Upper Lough Erne	73	64	21	26	102	Jan	57
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain [†]							
River Avon - Fordingbridge to Ringwood	113	150	193	167	920	Nov	309
Abberton Reservoir	103	239	212	870	801	Aug	445
Other sites surpassing table qualifying levels in Winter 2010/2011 in Northern Ireland [↑]							
Larne Lough	(15)	21	11	37	(106)	Dec	44

 $^{^\}dagger$ as the British threshold (1,400) is relatively high and no All-Ireland threshold has been set, qualifying levels of 800 & 50 have been chosen to select sites in Great Britain and Northern Ireland respectively, for presentation in this report.

Bar-headed Goose

Escape Anser indicus Native Range: S Asia

Bar-headed Geese were recorded at 35 WeBS sites in Britain, with a monthly peak of 30 birds in October. Maxima of six were present at Loch of Lowes and Par Sands Pools & St Andrews Road, both in September.

Snow Goose

Anser caerulescens

Escape and possible vagrant Native Range: N America

Reported from 19 WeBS sites, most records of Snow Goose involved one or two birds, the notable exception being 22 at Fairburn Ings in January. None of the records received in 2010/11 are considered to relate to birds of genuine provenance.

Ross's Goose

Anser rossii

Escape and possible vagrant Native Range: N America

Single Ross's Geese were reported from ten sites, with a monthly peak of five birds in October. The only possibly wild bird was one at North Norfolk Coast in midwinter.

Emperor Goose

Escape

Anser canagicus

Native Range: Alaska, NE Siberia

The resident flock was present at South Walney Island (Morecambe Bay) throughout 2010/11, peaking at 14 in August. Elsewhere, one was at Walthamstow Reservoirs in October.