

PRINCIPAL SITES

Table 5 below lists the principal sites for non-breeding waterbirds in the UK as monitored by WeBS. All sites supporting more than 10,000 waterbirds are listed, as are all sites supporting internationally important numbers of one or more waterbird species. Naturalised species (e.g. Canada Goose, Ruddy Duck) and non-native species presumed to have escaped from captive collections have been excluded from the totals, as have gulls and terns since the recording of these species is optional (see *Analysis* in *Methods*). All Greylag Geese are included following the reclassification of the listing of populations (Holt *et al.* 2011). Table 6 lists other sites holding internationally important numbers of waterbirds, which are not routinely monitored by standard WeBS surveys, but by the Icelandic Goose Census and aerial surveys.

A total of 183 sites are listed in Tables 5 & 6, 80 of which held a five-year mean peak of 10,000 or more birds. Typically there are few changes between years to the top twenty sites listed in the principal sites table, and the order of the top ten sites tends to remain unchanged although 2010/11 saw a marked rise by Somerset Levels. Across the UK, five-year

averages of sites holding 10,000 or more waterbirds were relatively similar compared to the previous year, with very few sites undergoing changes of greater than 10%.

The Wash remains the key site for waterbirds in the UK in terms of absolute numbers, and in 2010/11 it held a figure slightly below the average of the last five-years. This follows the 435,227 birds there in 2009/10 which represented the highest site total in WeBS history. Compared to recent averages, numbers at the other top 10 sites showed a high degree of variation. Notably, the peaks at the two principal inland sites, Somerset Levels and Ouse Washes, were the most ever recorded and the most for five years, respectively. Those totals at extensive inland wetlands may have been attributable to the effects of freezing conditions during the midwinter period, when exceptional numbers of dabbling ducks and Lapwing were presumably forced from smaller inland sites. The total number of non-breeding waterbirds at Morecambe Bay was the highest since 2003/04. In contrast, the peak at Humber Estuary was very low, and represents a continuation of a downward trend at that site in recent years.



The Wash supports internationally important numbers of 16 species.

Dawn Balmer

Table 5. Total number of waterbirds at principal sites in the UK, 2006/2007 to 2010/11 (includes data from all available sources) and species occurring in internationally important numbers at each. (Species codes are provided in Table 7.)

Site	06/07	07/08	08/09	09/10	10/11	Average	Int.Imp.Species
The Wash	381,341	373,566	345,609	435,228	360,074	379,164	PG,DB,SU,PT,OC,RP,GP,GV L,KN,SS,DN,BW,BA,CU,RK
Ribble Estuary	214,506	263,487	274,779	210,700	215,024	235,699	WS,PG,WN,T,PT,OC,RP,GV KN,SS,DN,BW,BA,RK
Morecambe Bay	194,990	155,048	220,210	236,976	240,267	209,498	PG,SU,T,PT,OC,KN,DN,BW, BA,CU,RK
North Norfolk Coast	217,121	144,141	209,045	204,250	220,287	198,969	PG,DB,RP,KN,BW,BA
Thames Estuary	226,590	189,813	158,941	141,275	145,940	172,512	DB,GA,SV,OC,AV,RP,GV,KN DN,BW,BA,RK
Humber Estuary	168,245	149,622	126,712	152,931	123,306	144,163	PG,DB,SU,AV,RP,GP,GV,KN DN,BW,BA,RK
Somerset Levels	108,163	114,246	104,339	74,482	181,157	116,477	MS,WN,T,PT,SV,GP,L
Dee Estuary (England and Wales)	103,753	104,315	124,122	103,072	118,390	110,730	SU,PT,CA,OC,KN,DN,BW,RK
Breydon Water and Berney Marshes	97,127	100,556	128,151	92,574	85,424	100,766	PG,WN,SV,AV,GP,L,BW
Solway Estuary	118,199	89,947	88,038	93,915	112,244	100,469	PG,YS,PT,SP,OC,RP,KN,RK
Ouse Washes	73,012	67,605	78,260	68,535	104,497	78,382	MS,BS,WS,WN,GA,PT,SV, PO,BW
Strangford Lough	74,657	87,535	81,876	74,063	71,688	77,964	MS,WS,QN,SU,KN,RK
Swale Estuary	62,313	92,111	66,619	87,603	77,162	77,162	T,RP,GP,BW
Forth Estuary	59,926	76,442	93,611	70,760	68,734	73,895	PG,SU,BA,RK
Severn Estuary	66,918	72,613	86,217	67,398	75,995	73,828	MS,BS,SU,PT,SV,RP,DN,RK
Blackwater Estuary	72,445	71,693	86,468	66,795	64,850	72,450	DB,GP,GV,KN,DN,BW,RK
Alt Estuary	50,362	40,261	48,791	60,285	107,802	61,500	PG,KN,SS,BA
Dengie Flats	61,848	53,043	58,269	64,265	61,803	59,846	DB,GV,KN,BA
Mersey Estuary	66,708	68,499	39,236	60,723	56,085	58,250	SU,DN,BW,RK
Loch of Strathbeg	51,245	52,062	61,125	67,483	46,441	55,671	WS,PG
Chichester Harbour	44,025	54,125	55,981	48,520	52,704	51,071	DB,DN,BW
Loughs Neagh and Beg	51,398	57,560	46,609	47,747	41,422	48,947	MS,WS,PO,SP,CA
Inner Moray/Inverness Firth	47,200	43,379	42,200	45,062	44,351	44,438	PG,JI
Lindisfarne	47,955	46,951	44,989	36,134	45,387	44,283	PG,YS,QS,BA
Stour Estuary	35,069	40,304	49,936	56,319	37,506	43,827	MS,KN,BW
Montrose Basin	45,569	45,842	55,216	23,030	38,383	41,608	PG
Hamford Water	34,465	45,489	49,200	35,782	41,987	41,385	DB,T,GV
Carmarthen Bay	52,989	48,033	28,941	31,694	27,957	37,923	OC,SS
Nene Washes	30,467	37,849	30,430	45,395	41,803	37,189	BS,WS,PT,BW
Burry Inlet	44,625	44,794	42,639	29,126	23,256	36,888	PT,OC
Lower Derwent Ings	43,648	34,293	26,056	38,772	40,995	36,753	
Alde Complex	33,419	47,038	31,326	32,875	35,133	35,958	AV,BW,RK
West Water Reservoir	57,529	28,196	47,847	26,449	16,650	35,334	PG
Dungeness and Rye Bay	35,636	39,400	27,379	34,758	36,341	34,703	MS,SV
Crouch-Roach Estuary	31,943	36,223	32,184	34,121	32,202	33,335	DB,BW
Lough Fovle	36,225	34,836	39,210	29,936	21,920	32,425	WS,QN,BA
Loch Leven	34,279	19,699	44,962	29,499	33,161	32,320	MS,WS,PG,JI,T,PT
Medway Estuary	24,672	36,478	40,126	18,270	35,664	31,042	PT,SV,AV,BW
Dornoch Firth	28,356	30,940	32,282	26,866	36,024	30,894	JI
Cromarty Firth	23,330	39,055	25,256	32,111	32,334	30,417	PG

Site	06/07	07/08	08/09	09/10	10/11	Average	Int.Imp.Species
Duddon Estuary	28,924	34,971	35,218	28,284	19,464	29,372	PT,RK
Rutland Water	30,859	23,394	27,356	31,501	26,893	28,001	MS,GA,SV
Langstone Harbour	28,041	30,784	22,066	29,053	26,778	27,344	DB
Abberton Reservoir	12,778	30,380	25,631	37,186	30,328	27,261	MS,GA,SV
WWT Martin Mere	28,857	22,659	26,507	28,043	23,666	25,946	WS,PG
Pegwell Bay	29,881	24,090	19,646	25,987	23,070	24,535	
Loch of Skene	24,337	20,619	20,403	17,967	28,725	22,410	PG
Orwell Estuary	23,996	20,511	23,934	21,009	20,245	21,939	BW
Colne Estuary	17,734	31,470	23,598	20,908	15,806	21,903	BW
Tees Estuary	23,036	23,222	17,356	23,881	19,338	21,367	
Cleddau Estuary	19,659	23,337	21,694	19,006	22,745	21,288	
Wigtown Bay	18,101	26,142	19,646	20,218	17,827	20,387	PG,YS
Deben Estuary	17,540	21,611	18,521	16,670	24,831	19,835	BW
Carsebreck and Rhynd Lochs	17,239	14,294	19,873	22,527	21,200	19,027	PG
Exe Estuary	17,825	19,278	19,570	17,076	20,379	18,826	BW
Pagham Harbour	22,679	18,438	16,672	16,912	15,470	18,034	DB,BW
Belfast Lough	18,964	19,414	16,262	18,646	15,910	17,839	BW
Lavan Sands	22,773	16,502	13,991	15,824	16,683	17,155	
Eden Estuary	5,688	12,960	36,796	11,407	18,177	17,006	PG
Ythan Estuary	20,245	14,117	18,459	14,620	16,270	16,742	
Poole Harbour	15,975	15,759	17,879	15,064	16,984	16,332	AV,BW
Tay Estuary	18,462	18,199	14,440	14,368	13,971	15,888	
Fleet and Wey	13,772	13,053	14,314	15,682	22,545	15,873	MS
Inner Firth of Clyde	17,450	17,101	14,817	13,300	14,247	15,383	SZ
North West Solent	13,917	15,623	16,758	15,210	15,261	15,354	
Slains Lochs	11,408	17,604	19,700	14,748	11,782	15,048	PG
Cotswold Water Park (West)	12,195	12,530	13,361	17,434	14,156	13,935	
Middle Yare Marshes	12,711	18,657	13,817	11,605	12,433	13,845	
Mersehead RSPB Reserve	16,113	12,456	1,420	22,808	13,196	13,199	YS,PT
Blyth Estuary	13,433	19,188	14,092	10,024	8,223	12,992	
Portsmouth Harbour	14,275	14,019	14,035	12,172	9,549	12,810	DB
Taw-Torridge Estuary	13,155	10,240	16,373	12,231	11,191	12,638	
Southampton Water	11,467	11,360	11,170	11,680	14,397	12,015	
Arun Valley	13,791	11,964	10,838	9,595	11,783	11,594	
Dyfi Estuary	13,123	12,331	12,814	9,607	9,781	11,531	
WWT Caerlaverock (Inland)	14,199	13,933	10,545	6,224	12,712	11,523	WS,YS
Nosterfield Gravel Pits	12,290	11,485	9,741	14,646	8,808	11,394	
Ouse Fen and Pits	12,948	8,729	13,248	8,406	7,957	10,258	
Pitsford Reservoir	11,472	8,405	7,888	10,891	12,357	10,203	GA
West Freugh	.	.	.	17,657	2,352	10,005	PG,NW
Outer Ards Shoreline	12,293	9,674	9,734	8,545	8,993	9,848	QN
Loch of Lintrathen	10,936	11,155	13,133	5,641	7,480	9,669	PG
Loch of Harray	12,639	7,252	7,676	10,205	9,042	9,363	JI
Dundrum Inner Bay	6,566	13,582	8,634	9,269	6,478	8,906	QN
Lee Valley Gravel Pits	7,477	9,073	9,022	8,635	9,861	8,814	GA
R.Avon: R'wood-Christchurch	12,900	9,306	4,749	9,631	7,190	8,755	BW
R.Avon: F'bridge-Ringwood	8,636	8,238	7,809	8,126	9,975	8,557	GA,BW
Carlingford Lough	9,693	10,705	10,289	5,671	5,520	8,376	QN
Kilconquhar Loch	1,187	7,620	14,883	10,469	7,388	8,309	PG
Upper Lough Erne	8,785	7,460	6,455	6,043	8,514	7,451	MS,WS
Loch Fleet Complex	7,141	7,753	4,804	7,745	8,428	7,174	JI
Hule Moss	2,649	7,092	6,570	10,251	8,485	7,009	PG
Wedholme Flow	1,295	2,531	8,270	12,846	8,378	6,664	PG

Site	06/07	07/08	08/09	09/10	10/11	Average	Int.Imp.Species
Loch of Tankerness	.	.	7,731	2,480	8,198	6,136	JI
Dupplin Lochs	1,450	2,100	.	18,608	870	5,757	PG
Loch of Stenness	6,040	5,992	4,961	5,043	5,692	5,546	JI
Lochhill	1,814	5,506	7,516	7,000	.	5,459	PG
Horsey Mere	5,430	.	.	.	5,125	5,278	PG
Fala Flow	2,170	3,650	1,510	13,190	5,665	5,237	PG
North Uist	4,437	5,924	6,176	4,880	4,696	5,223	YN
Dee Flood Meadows	5,975	3,831	2,692	6,458	7,059	5,203	PT
Biggar Moss	638	7,442	7,375	.	.	5,152	PG
R.Nith: Keltonbank - Nunholm	8,115	.	4,282	7,563	478	5,110	YS
Loch of Boardhouse	5,983	4,939	5,200	4,607	2,754	4,697	JI
Orchardton and Auchencairn	4,167	2,799	5,017	5,221	4,446	4,330	YS
Loch Watten	2,964	2,827	3,864	7,611	2,975	4,048	JI
Overcote Marina	7,828	.	6,055	2,006	202	4,023	BW
Loch of Isbister	4,326	3,491	2,759	7,013	2,427	4,003	JI
Loch Bee (South Uist)	3,906	3,673	3,708	.	3,423	3,678	MS,JH
Water Sound	2,040	1,667	3,077	3,696	7,329	3,562	JI
Tweed Estuary	3,675	2,784	2,982	3,416	3,552	3,282	MS
Loch Heilen	2,568	4,899	492	7,980	280	3,244	JI
Martham Broad	1,059	1,198	10,932	1,180	992	3,072	PG
Loch of Swannay	3,073	3,729	3,259	3,130	2,149	3,068	JI
Loch of Skail	2,542	2,785	2,619	4,712	2,670	3,066	JI
Broubster Leans	2,979	2,979	JI
Tiree	5,297	4,196	979	787	.	2,815	NW,YN
Loch Eye	1,086	1,667	2,001	5,708	3,560	2,804	WS
Warton Floods	.	3,049	3,137	1,691	2,489	2,592	BW
Lower Lough Erne	3,139	3,282	1,065	1,143	2,110	2,148	MS
Machrihanish	1,831	1,432	1,494	2,180	.	1,734	NW
Isle of Coll	3,143	1,245	341	323	.	1,263	NW,YN
Colonsay/Oronsay	.	1,200	.	.	.	1,200	YN
Sound of Gigha	105	194	1,462	1,983	1,940	1,137	NW,ND
Rhunahaorine	940	1,451	879	1,017	.	1,072	NW
Newmains Ponds	.	.	.	1,782	134	958	YS
Upper Quoile River	1,177	653	.	.	.	915	MS
Rova Head to Wadbister Ness	.	502	929	1,177	933	885	ND
Stranraer Lochs	1,105	877	273	490	.	686	NW
Whiteness to Skelda Ness	359	521	.	658	513	513	EF,SZ
Keills Peninsula and Danna	300	913	239	214	.	417	NW

Table 6. Other sites in the UK holding internationally important numbers of waterbirds in 2010/11 which are not routinely monitored by standard WeBS surveys. (Species codes are provided in Table 7.)

Site	Int.Imp.species	Site	Int.Imp.species
Berney Marshes	PG	North Norfolk Coast	PG
Bute	JI	Burnham Overy Saltmarsh	PG
Caithness Lochs	JI	Holkham Bay	PG
Colonsay/Oronsay	YN	Holme and Thornham	PG
Cromarty Firth	PG	Norton Marsh	PG
Nigg Bay	PG	Scot Head	PG
Forth Estuary	PG	Wells-next-the-Sea	PG
Aberlady Bay	PG	North Uist	YN
Forth Grangemouth to Kincardine	PG	Balranald, Cletttraval & Tigharry	YN
Hule Moss (West)	PG	Berneray	YN
Humber Estuary	PG	Malacate To Grenitote	YN
Read's Island Flats	PG	Orkney	JI, YN
Inner Moray and Inverness Firth	PG,JI	South Ronaldsay	JI
Beaulf Firth	PG,JI	South Walls (Hoy)	YN
Findhorn Bay	PG	Simonswood Peat Moss	PG
Islay	NW,YN	Solway Firth	YS, PG
Isle of Oronsay	YN	Southwest Lancashire	PG
Isle of Lismore	NW	Strathearn (West)	PG JI
Loch Fleet	JI	Tay and Isla Valley	PG,JI
Lune Estuary	PG	Tayinloan	NW
Martin Mere and Ribble Estuary	WS	The Wash	PG
Middlemuir (New Pitsligo)	PG	Snethisham	PG
Morecambe Bay	PG	Winter Loch, St Fergus Gas Term.	PG
Wyre to Cockerham	PG		
Wyre Estuary	PG		

Table 7. Species codes for species listed in Tables 5., 6. and 8.

AV	Avocet	JE/JH	British/Irish Greylag Goose	RH	Red-throated Diver
BA	Bar-tailed Godwit	JI	Greylag Goose	RK	Redshank
BS	Bewick's Swan		(Icelandic population)	RM	Red-breasted Merganser
BV	Black-throated Diver	KN	Knot	RP	Ringed Plover
BW	Black-tailed Godwit	L	Lapwing	RU	Ruff
CA	Cormorant	LG	Little Grebe	SP	Scaup
CO	Coot	MA	Mallard	SS	Sanderling
CU	Curlew	MS	Mute Swan	SU	Shelduck
CX	Common Scoter	ND	Great Northern Diver	SV	Shoveler
DB	Dark-bellied Brent Goose	NW	Greenland White-fronted Goose	SZ	Slavonian Grebe
DN	Dunlin	OC	Oystercatcher	T	Teal
E	Eider	PG	Pink-footed Goose	TT	Turnstone
EW	European White-fronted Goose	PO	Pochard	WN	Wigeon
GA	Gadwall	PS	Purple Sandpiper	WS	Whooper Swan
GG	Great Crested Grebe	PT	Pintail	YN	Barnacle Goose
GK	Greenshank	QN	Light-bellied Brent Goose		(Nearctic population)
GP	Golden Plover		(Nearctic population)		
GV	Grey Plover	QS	Light-bellied Brent Goose		
			(Svalbard population)		