

Gadwall

Anas strepera

GB max: 20,526 Jan
NI max: 183 Nov

International threshold
(NW Europe population): 600
Great Britain threshold: 250
All-Ireland threshold: 20*

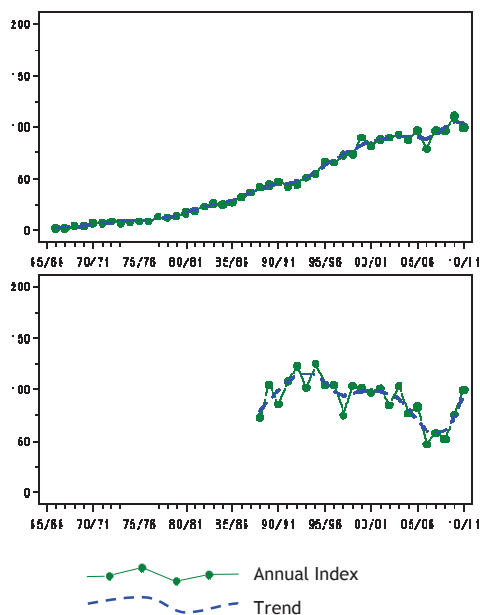


Figure 21.a, Annual indices & trend for Gadwall in GB (above) & NI (below).

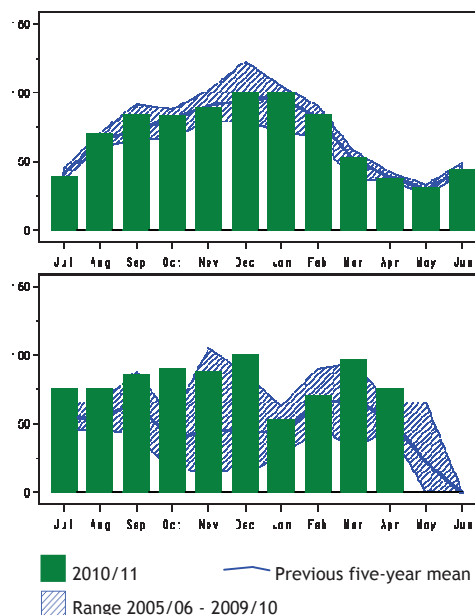


Figure 21.b, Monthly indices for Gadwall in GB (above) & NI (below).

Following a sustained rise over the past thirty years, the rate of increase in Gadwall numbers in Britain appears to be slowing. Monitoring schemes elsewhere in Europe, e.g. The Netherlands (Hornman *et al.* 2012) and Switzerland (Keller & Müller 2012), have also shown marked increases in the population of this species which continue to be maintained.

In general, the monthly indices suggest no marked net influx or exodus of Gadwall into or from Britain during the cold winter of 2010/11. Based on five-year means, seven sites in the UK are of international importance for Gadwall. These sites included Pitsford Reservoir for the first time, following an all-time high of 1,044 birds there in October 2010. Rutland Water again hosted the largest aggregation of the year (1,289, Dec), albeit considerably fewer than the exceptionally high number present during winter 2009/10. The historic maximum from Rutland Water relates to an unprecedented count of 2,181 birds in November 1997. River Avon (Fordingbridge to Ringwood) and Abberton

Reservoir both held maxima of 1,000+ (for the first and second times, respectively). The notable January peak from the River Avon is indicative of a shift in distribution from other frozen wetlands. Maxima were typical of recent years at the other sites of international importance. Based on the numbers present at Dungeness & Rye Bay in both 2009/10 and 2010/11, it would seem likely that site will also surpass the threshold for international importance in the near future.

Seven further sites are of national importance. In addition, unusually high counts emanated from a number of other less typical locations during the winter, perhaps linked to displacement of birds (either from within Britain or perhaps elsewhere in Europe) due to the adverse weather conditions. These included all-time maxima at Whitlingham Country Park (720, Dec) and Sonning Eye & Henley Road Gravel Pits (551, Jan).

The relatively small population of Gadwall in Northern Ireland, most of which use Loughs

Neagh & Beg and Strangford Lough, has shown a notable increase in the past two years. Will the species continue to increase there, and thereby mirror the upward trend that has characterised other northwest European countries?

Outwith winter, a site-record total of 375 at North Norfolk Coast in May is a useful indication of the increasing national breeding population of Gadwall, which is no longer assessed and reported on by the *Rare Breeding Birds Panel* (Holling *et al.* 2012).

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the UK							
Rutland Water	904	992	1,520	2,119	1,289	Dec	1,365
Ouse Washes	220	970	1,508	998	729	Feb	885
River Avon - Fordingbridge to Ringwood	755	725	653	854	1,149	Jan	827
Abberton Reservoir	(535)	483	493	797	1,128	Sep	725
Lee Valley Gravel Pits	518	703	700	669	896	Dec	697
Thames Estuary	451	(431)	687	909	(357)	Feb	682
Pitsford Reservoir	444	264	352	916	1,044	Oct	604 ▲
Sites of national importance in Great Britain							
Dungeness and Rye Bay	362	485	417	1,014	715	Dec	599
Somerset Levels	424	706	614	485	317	Feb	509
Tees Estuary	433	464	342	480	433	Sep	430
Sutton and Lound Gravel Pits	425	437	282	539	399	Feb	416
Fen Drayton Gravel Pits	553	387	442	361	303	Dec	409
Cotswold Water Park (West)	330	(217)	(395)	420	(427)	Feb	393
Orwell Estuary	340 ¹⁰	268	722 ¹⁰	414	194	Oct	388
Minsmere	410	468	388	434	216	Jul	383
Loch Leven	309	284	345 ¹²	417	422	Sep	355
Whitlingham Country Park	111	114	230 ¹²	547	720	Dec	344 ▲
North Norfolk Coast	186	314	388	418	375	May	336
Blackwater Estuary	231	395	154	488	(372) ¹²	Dec	328
Woolston Eyes	(84)	397	192	439	103	Nov	283
Middle Tame Valley Gravel Pits	(131)	(108)	275	(94)	(117)	Sep	275
Nene Washes	151	277	170	494	234	Mar	265 ▲
Little Paxton Gravel Pits	215	324	280	307	173	Jan	260
Ouse Fen and Pits (Hanson/RSPB)	(49)	203	317	293	219	Feb	258 ▲
Chew Valley Lake	150	245	210	295	375	Oct	255 ▲
Sonning Eye and Henley Road GPs	100		108	241	551	Jan	250 ▲
Sites of all-Ireland importance in Northern Ireland							
Loughs Neagh and Beg	143	132	164	144	158	Mar	148
Strangford Lough	68 ¹⁰	86 ¹⁰	60 ¹⁰	69	87	Nov	74
Sites no longer meeting table qualifying levels in WeBS-Year 2010/2011							
Alton Water	166	109	226	330	123	Nov	191
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain							
Fleet and Wey	78	42	49	133	591	Dec	179
Bewl Water	89	158	183	345 ¹²	347 ¹²	Dec	224
Brent Reservoir	107	114	109	329	315	Oct	195
Crouch-Roach Estuary	17	111	138	132	290	Jan	138
Buckden and Stirtloe Pits			187	214	286 ¹²	Oct	229
Watermead Country Park North	142	120	95	186	275	Dec	164
Dogmersfield Lake	115	35	70	195	255	Nov	134
Other sites surpassing table qualifying levels in Winter 2010/2011 in Northern Ireland							
Hillsborough Main Lake	2	0	13	18	22	Jan	11

Baikal Teal

Anas formosa

Vagrant and escape
Native Range: Asia

A Baikal Teal, of unknown origin, was reported from Rochester Pools (Kent) in January and March. There have been three previous

WeBS records of this species, including one at Minsmere in 2001 which was considered to be a genuine vagrant.

Eurasian Teal

Anas crecca

GB max: 162,401 Jan
NI max: 4,707 Jan

International threshold
(NW Europe population): 5,000
Great Britain threshold: 2,100
All-Ireland threshold: 450

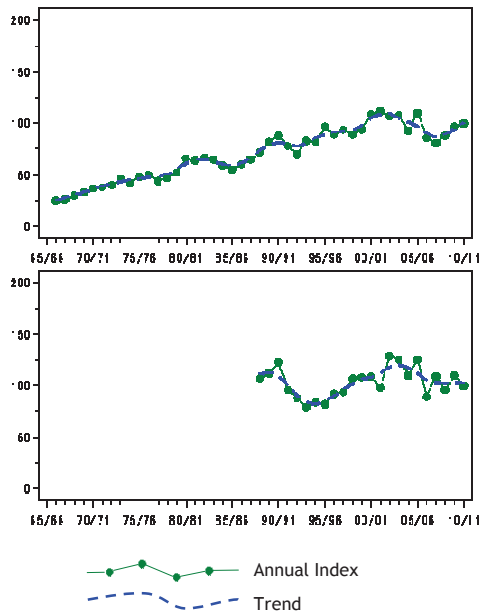


Figure 22.a, Annual indices & trend for Teal in GB (above) & NI (below).

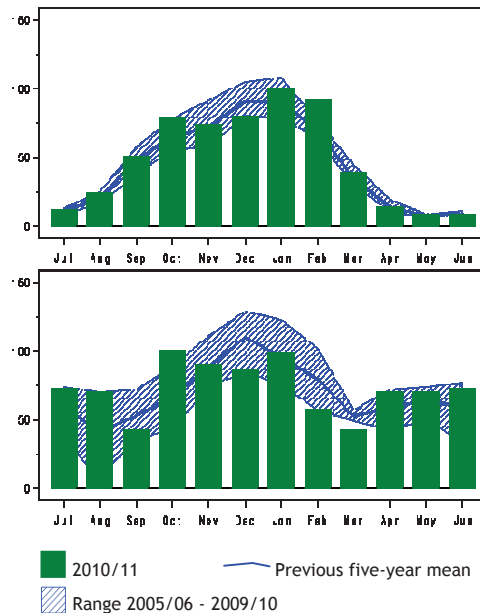


Figure 22.b, Monthly indices for Teal in GB (above) & NI (below).

Most Teal that spend the winter in Great Britain originate from breeding areas either in Iceland, Scandinavia (especially Finland) or northwest Russia. However, Guillemain *et al.* (2005) showed that any splitting into distinct 'north-western European' and 'Mediterranean' sub-populations (e.g. Scott & Rose 1996) was inappropriate, and that all birds wintering in west Europe are best considered as belonging to a single larger population. Hence, in extremely cold winters, such as 2010/11, some Teal are likely to be forced to make use of the whole flyway to flee cold conditions.

The count of 45,884 at Somerset Levels in February 2011 is the largest site total ever. Duck numbers have probably responded to habitat management in that area, but this high total may also represent a response to the cold weather in December and January which could have resulted in waterfowl concentrating in south-west England. Alternatively, it may represent increased flocking (and hence associated detectability) during the frozen

conditions when Teals may be forced onto open water. At other times, vegetated ditches are favoured by Teal, but such habitats can be difficult to count effectively in unfrozen conditions.



John Harding

After a period of steady increase, the national index for Teal in Britain has been stable in recent years. Reasons for this apparent change in trajectory are unclear, but may be linked at least

in part to three relatively cold winters, particularly those of 2009/10 and 2010/11. Only continued monitoring will determine if the species reverts to showing a decline during winters characterised by weather conditions more typical of the recent era.

Based on current five-year mean peak counts, five other sites in the UK hold internationally important numbers of Teal, and a further 20 sites surpass the threshold for national importance.

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the UK							
Somerset Levels	21,581	17,663	24,029	13,680	45,884	Feb	24,567
Ribble Estuary	(6,959)	8,045	6,072	8,064	5,256	Nov	6,879
Hamford Water	(1,969)	3,255	10,684 ¹⁰	3,952	(7,289)	Dec	6,295
Swale Estuary	(3,728)	4,470	5,485	7,030	5,831	Oct	5,704
Loch Leven	2,527	4,920	7,580 ¹²	5,591	6,151	Sep	5,354
Morecambe Bay	(2,338)	2,934	7,327	(4,009)	(3,169)	Oct	5,131 ▲
Sites of national importance in Great Britain							
Lower Derwent Ings	4,221	3,714	3,393	6,411	6,361	Mar	4,820
Thames Estuary	3,940	(3,373)	4,393	5,917	(4,111)	Dec	4,750
Severn Estuary	4,233	5,428	4,710	3,882	(4,568)	Jan	4,564
Ouse Washes	4,333 ¹²	3,135	5,351	2,492 ¹²	5,245 ¹²	Mar	4,111 ▼
North Norfolk Coast	3,638	3,278 ¹⁰	3,524	5,708	4,307	Nov	4,091
Blackwater Estuary	(2,786)	(2,207)	(4,002)	(2,730)	(4,052)	Jan	(4,052)
Alde Complex	3,560	3,334	3,961	4,986	4,071	Nov	3,982
Nene Washes	1,677	2,078	1,851	9,012	3,916	Jan	3,707
Mersey Estuary	(3,593)	(2,072)	(2,000)	(3,230)	(2,988)	Jan	(3,593) ▼
Humber Estuary	(2,009)	2,365	(3,385)	(3,538)	(4,782)	Oct	3,518
The Wash	2,138	2,537	(2,308)	5,811	3,176	Jan	3,416
Dee Estuary (England and Wales)	3,719	2,144	3,129 ¹⁰	4,413	3,348	Oct	3,351
Abberton Reservoir	2,662	3,410	872	4,975	3,924	Oct	3,169
Breydon Water and Berney Marshes	3,620 ¹²	5,612 ¹²	3,216 ¹²	1,337 ¹²	1,017 ¹²	Mar	2,960
Mersehead RSPB Reserve	3,900	1,045		3,560	2,080	Nov	2,646
Hickling Broad	2,000		3,150	2,401			2,517
Solway Estuary	(2,265)	(839)	(1,648)	1,342	3,306	Nov	2,324
Forth Estuary	2,531	1,877	2,370	2,293	2,551	Jan	2,324
Poole Harbour	(874)	(1,923)	(1,715)	(1,415)	(2,297)	Dec	(2,297) ▲
Arun Valley	2,129	(2,343)	1,985	(2,026)	(1,831)	Jan	2,152
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	1,724	1,752	1,347	1,790	2,104 ¹⁰	Jan	1,743
Lough Foyle	915	1,562	2,000	2,020	1,325	Oct	1,564
Loughs Neagh and Beg	1,049	1,297	889	1,345	1,030	Oct	1,122
Belfast Lough	488	640	479	618	723	Oct	590
Carlingford Lough	440	565	571	309	487	Feb	474
Sites no longer meeting table qualifying levels in WeBS-Year 2010/2011							
Inner Moray and Invermess Firth	(1,890)	(2,208)	1,944	1,338	2,859	Dec	2,087
WWT Martin Mere	1,430	1,200	2,005	2,640	2,500	Nov	1,955
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain							
Chew Valley Lake	515	360	435 ¹²	1,425	3,500	Oct	1,247
North West Solent	1,100	1,461	1,116	1,520	3,400	Dec	1,719
Inner Moray and Invermess Firth	(1,890)	(2,208)	1,944	1,338	2,859	Dec	2,087
WWT Martin Mere	1,430	1,200	2,005	2,640	2,500	Nov	1,955
Cleddau Estuary	1,389	1,991	1,171	(1,347)	(2,246)	Dec	1,699
Other sites surpassing table qualifying levels in Winter 2010/2011 in Northern Ireland							
Larne Lough	189	168	543	217	578	Jan	339

Green-winged Teal

Anas carolinensis

Vagrant

Native Range: N America

Singles were recorded at 11 sites in Britain between November and April. These included long-stayers at WWT Caerlaverock (Nov-Dec),

Forth Estuary (Dec-Jan), Mill Dam & Balfour Mains Pools (Jan-Feb), and Solway Estuary (Feb-Mar).

Mallard

Anas platyrhynchos

GB max: 133,775 Jan
NI max: 7,972 Oct

International threshold (NW Europe): 45,000
Great Britain threshold: 6,800[†]
All-Ireland threshold: 380

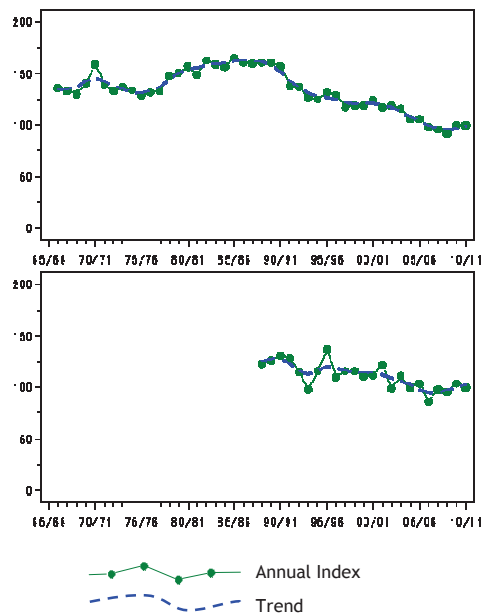


Figure 23.a, Annual indices & trend for Mallard in GB (above) & NI (below).

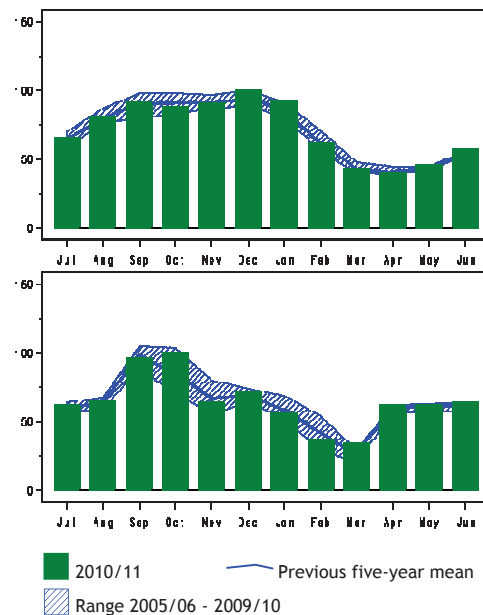


Figure 23.b, Monthly indices for Mallard in GB (above) & NI (below).

The WeBS trend indicates that the number of Mallards wintering in Britain has steadily declined since the early 1990s. However, the index appears to have stabilised in recent years, presumably at least partly in response to two cold winters; marked increases in the monthly indices for Britain in midwinter (December 2010 and January 2011) are certainly suggestive of an arrival of birds from the continent in response to the cold weather during that period. This concurs with the assumption that the recent downward trend for Mallard is primarily related to a drop in continental immigration (Sauter *et al.* 2010). Alternatively, such conditions may also concentrate Mallard on larger wetlands that generally receive better coverage through WeBS, birds having been forced off smaller sites that are more likely to be frozen. However, ring-recovery data up to the late-1990s suggested that 75% of the birds in Britain and Ireland during the winter months were continental immigrants (Wernham *et al.* 2002) so the potential effects of a very harsh winter, such as

2010/11, are obvious. As documented in previous WeBS reports, the apparent fall in the UK's wintering population contrasts with the breeding numbers which increased by 33% between 1984 and 2009 (Baillie *et al.* 2012).

The largest WeBS count in the UK during 2010/11 was from Lower Derwent Ings where 4,350 were present in December, considerably more than has been recorded at the site in recent years. Counts of 3,000+ were regular there during the 1980s and 1990s, and the historic maximum dates back to a high of 8,142 in March 1982 (when the species' national abundance was at its peak). Maxima at the majority of the other most important sites, including Loughs Neagh & Beg (the only other site to have ever held 8,000+ Mallard), were more typical of recent years. Also notable was the highest peak ever from Cotswold Water Park (West) and the largest for several years from Loch Leven (most since 1989/90), Ellesmere Lakes (1979/80), and Inner Moray & Inverness Firth (2002/03).

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of all-Ireland importance in Northern Ireland							
Loughs Neagh and Beg	4,351	3,767	1,911	4,287	4,242	Oct	3,712
Strangford Lough	(1,010)	1,950	2,177	2,125	1,630	Nov	1,971
Lough Foyle	1,036	830	965	995	1,079	Sep	981
Lower Lough Erne	551	702	(295)	(226)	346	Oct	533
Belfast Lough	(344)	457	447	419	299	Jan	406
Sites with mean peak counts of 2,000+ birds in Great Britain[†]							
Severn Estuary	3,661	2,954	3,091	3,086	3,334	Oct	3,225
Ouse Washes	2,606 ¹²	2,918 ¹²	(3,024)	3,336 ¹²	3,182 ¹²	Jan	3,013
The Wash	2,417	2,316	(2,586)	3,030	(1,886)	Jan	2,588
Lower Derwent Ings	2,890	1,272	2,001	1,865	4,350	Dec	2,476
Morecambe Bay	(1,837)	(1,240)	(1,926)	2,145	2,380	Jan	2,263
WWT Martin Mere	2,211	2,000	1,665	2,250	2,640	Jan	2,153
Clifford Hill Gravel Pits Consolidated	2,027	1,733	2,048	2,199	2,205	Sep	2,042
Humber Estuary	(1,911)	2,166	1,644	2,417	1,799	Jan	2,007
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain[†]							
Loch Leven	1,620	1,261	1,178	675	2,169	Sep	1,381
Other sites surpassing table qualifying levels in Winter 2010/2011 in Northern Ireland							
Upper Lough Erne	304	370	302	221	417	Jan	323

[†] as no sites exceed the British threshold, a qualifying level of 2,000 has been chosen to select sites for presentation in this report

Chestnut Teal

Anas castanea

Escape

Native Range: S Australia

Singles were at Westport Lake (Aug) and Fen Drayton Gravel Pits (Nov).

Northern Pintail

Anas acuta

International threshold (NW Europe population): 600
Great Britain threshold: 290
All-Ireland threshold: 20

GB max: 19,655 Jan
NI max: 449 Feb

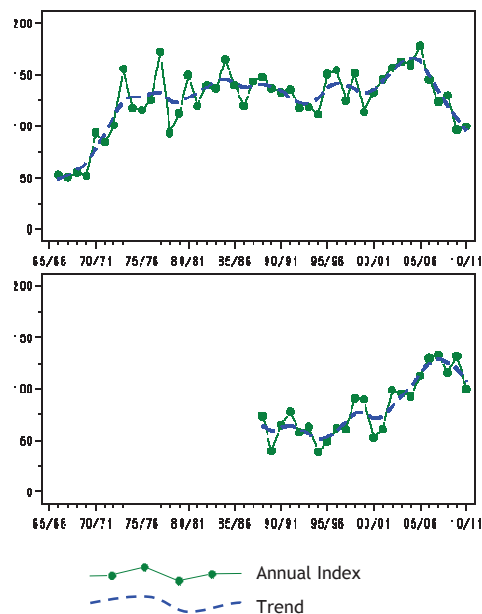


Figure 24.a, Annual indices & trend for Pintail in GB (above) & NI (below).

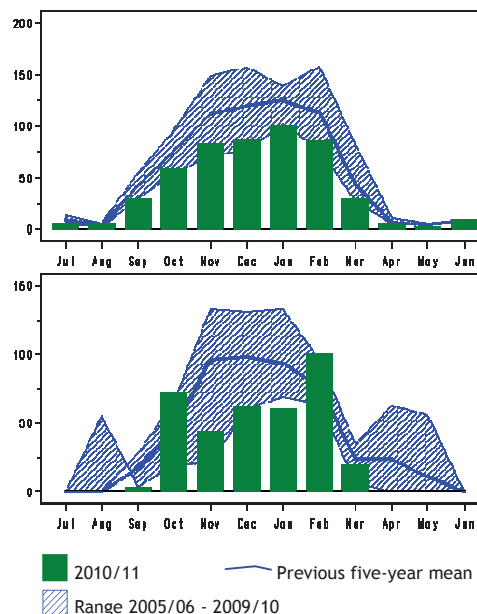


Figure 24.b, Monthly indices for Pintail in GB (above) & NI (below).

In 2010/11, numbers of Pintail in Britain were at a similarly low level as the previous year when the annual index dropped to its lowest value for over thirty years. As recently as 2005/06, the species reached a historic peak; the reasons for a rapid change of fortunes are unclear. The monthly indices show that numbers were below average throughout the autumn and winter, not only during the freezing midwinter period that resulted in clearer effects on other species.

The relative lack of Pintail at WeBS sites in Britain in October and November would tend to suggest either a decrease in overall population size or a shift in core wintering range; also implied by an increase in The Netherlands in recent years (Hornman *et al.* 2011). If the latter was the case, the UK would perhaps have been expected to receive an influx of Pintails during

the onset of frozen conditions across northwest Europe in December. Alternatively, some of the UK's normal wintering population may have moved southwards to Iberia or northern Africa.

Fifteen sites in Britain are of international importance. At the two most important sites, the reported maxima in 2010/11 were again lower than those which have typified recent years. The year's peak count was from Solway Estuary where the December total of 4,262 was the highest for six years; the historic peak at that site relates to a count of 6,570 in December 2001. Fifteen further sites are of national importance; annual maxima at these were generally close to or slightly below average.

The index for Northern Ireland dropped in comparison to 2009/10, with Strangford Lough in particular supporting below average numbers.

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the UK							
Burry Inlet	4,692	6,244	4,058	2,750	(2,680)	Jan	4,436
Dee Estuary (England and Wales)	6,172	(4,334)	3,932	2,960	3,669	Nov	4,213
Morecambe Bay	2,609	(2,543)	2,593	3,186	2,830	Oct	2,805
Ribble Estuary	(1,094)	3,639	2,178	(2,124)	2,074	Jan	2,630
Solway Estuary	2,429	1,047	(888)	(977)	4,262	Dec	2,579
Duddon Estuary	(2,317)	(1,153)	2,481	(629)	(1,209)	Nov	2,481
Nene Washes	1,931	1,267	1,951	2,400	1,237	Jan	1,757
Ouse Washes	1,823 ¹²	1,713 ¹²	(1,697)	743 ¹²	1,187	Feb	1,433
Mersehead RSPB Reserve	1,010	1,445		1,690	479	Feb	1,156
Loch Leven	217	213	1,554 ¹²	1,396	676	Sep	811
Severn Estuary	(1,161)	668	655 ¹⁰	(494)	456	Nov	735
The Wash	1,215	652	(560)	294	(104)	Jan	720
Medway Estuary	(582)	663	(351)	(353)	(400) ¹²	Dec	663
Dee Flood Meadows	916	750	196	227	1,060	Feb	630 ▲
Somerset Levels	530	985	682	534	332	Jan	613
Sites of national importance in Great Britain							
Swale Estuary	731	597	630	381	521	Dec	572
North Norfolk Coast	753	697 ¹⁰	421	437	503	Jan	562
Wigtown Bay	166	834	642	689	240	Nov	514
Blackwater Estuary	(401)	(201)	(488)	(203)	(353)	Feb	(488)
Pagham Harbour	566	(464)	(447)	337	552	Feb	485
Lower Derwent Ings	656	674	298	278	405	Mar	462
WWT Martin Mere	580	380	380	550	294	Dec	437
Stour Estuary	467	303	486 ¹⁰	345 ¹⁰	449	Jan	410
Arun Valley	574	(322)	227	(142)	(302)	Jan	401
North West Solent	484	407	320	279	500	Jan	398
Traeth Bach	325	341	403	233	(151)	Jan	326 ▲
Alde Complex	441	447	276	281	154	Nov	320
Lindisfarne	445	327	(272)	(200)	154	Oct	309
River Avon: Ringwood to Christchurch	(456)	507	245	(274)	58	Jan	308
Cromarty Firth	205	(171)	287	(246)	(420)	Nov	290 ▲
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	496	395	449	487	301	Feb	426
Lough Foyle	123	157	185	112	156	Jan	147
Sites no longer meeting table qualifying levels in WeBS-Year 2010/2011							
Orwell Estuary	753 ⁸	158	125 ¹⁰	170 ¹⁰	85	Nov	258
Foryd Bay	330	152	360 ¹²	160	190	Dec	238
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain							
Inner Moray and Inverness Firth	314	232	236	211	305	Feb	260

Yellow-billed Pintail

Anas georgica

Escape
Native Range: S America

One was as at Cherwell Valley in August.

White-cheeked Pintail

Anas bahamensis

Escape
Native Range: S America

Singles were seen at four sites.

Garganey

Anas querquedula

International threshold
(W Siberia and Europe population): 20,000
Great Britain threshold: +[†]
All-Ireland threshold: +[†]

GB max: 45 May
NI max: 0

Being summer migrants to the UK, Garganey are reported for the calendar year, here 2010. Records were received from 58 WeBS sites, a similar number to the previous three years. All were in England, with the exception of four singles in Scotland (all in spring) and one on the Isle of Man (in August). For the third year in a row, the species was seen in February, the herald of a spring passage involving records from 25 sites. Typically, highest counts were noted post breeding season; peaks of eight at Grafham Water (Aug), and three at both Maxey Pits (Aug) and Lee Valley Gravel Pits (Sep). The species was noted at four sites in October.



Thelma Sykes

	2006	2007	2008	2009	2010	Mon	Mean
Sites with mean peak counts of 4 or more birds in Great Britain							
Dungeness and Rye Bay	9	9	8	7	(2)	Apr	8
Other sites surpassing table qualifying levels in Summer 2010 in Great Britain							
Nene Washes	(2)	(5)	0	0	(8)	Apr	3
Grafham Water	0	0	0	0	8	Aug	2
Chew Valley Lake	6	1	1	4	4	Sep	3
Stodmarsh	1	2	0	5	4	Aug	2

[†] as no British or All-Ireland thresholds have been set a qualifying level of four has been chosen to select sites for presentation in this report

Blue-winged Teal

Anas discors

Vagrant
Native Range: N America

Singles were recorded at Gilmourton Ponds Valley Lake (Jun). Three in a WeBS-year has been (Feb), North Norfolk Coast (Apr) and Chew surpassed just twice before.

Northern Shoveler

Anas clypeata

International threshold (NW & C Europe population): 400
Great Britain threshold: 180
All-Ireland threshold: 20*

GB max: 11,104 Oct
NI max: 114 Nov

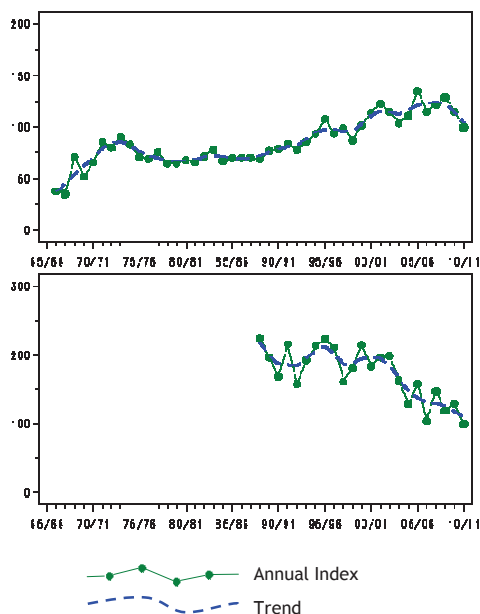


Figure 25.a, Annual indices & trend for Shoveler in GB (above) & NI (below).

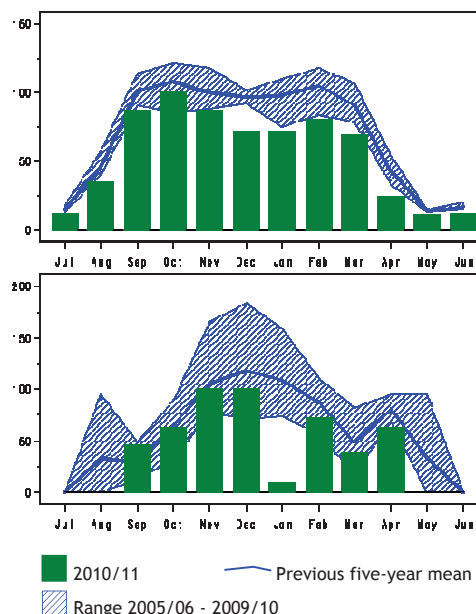


Figure 25.b, Monthly indices for Shoveler in GB (above) & NI (below).

Contrary to the longer term trend, the national index for Shoveler in Britain fell for the second year in succession. It remains to be seen if this represents merely a temporary response to two cold winters, as might be expected. The monthly indices show the sensitivity of this species to frozen conditions; the marked drop-off in the number recorded at British WeBS sites in December being especially pertinent. It is likely that an influx of Shoveler into more southern areas of Europe, such as France and Iberia, took place at this time, but data from those countries are currently unavailable to be able to validate this assertion. Prior to these two relatively cold winters, it was considered that a greater proportion of Shoveler were wintering at sites in more northern latitudes in response to milder conditions. For example, the species has also steadily increased in The Netherlands over the longer term (Hornman *et al.* 2011).

Nine sites surpassed the threshold for international importance. Maxima at most of these were slightly below average, most notably at Somerset Levels where the peak of just 396 in

February was the lowest since 1996/97 and considerably less than the historic peak there of 2,190 in January 2003. The January 2011 total of just 242 Shoveler contrasts with an exceptional peak of Wigeon at the site during the same WeBS Core count; a good example of the different response of these two dabbling species to a period of severe weather. Among the regular dabbling ducks wintering in north-west Europe, Shoveler (along with Teal) has shown the most marked redistribution in response to recent climate change (Dalby *et al.* 2012).

Among the growing list of sites that surpass the threshold for national importance, the peaks at Chew Valley Lake (620, Oct), Minsmere (340, Nov), and Grafham Water (268, Dec) were especially notable. Elsewhere, evidence of a response to the onset of freezing conditions in December was also provided by the maxima noted during that month at several other sites in southern England, including inland at Chichester Gravel Pits and King George VI Reservoir, and on/near the coast at North-west Solent, Fleet & Wey and Eastbourne Park Lakes.

In Northern Ireland, the trend showed a further decline in wintering numbers, typifying the recent situation there for Shoveler and several other dabbling duck species. The cold

weather conditions appear to have had a particularly profound effect in Northern Ireland during January.

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the UK							
Ouse Washes	696 ¹²	1,071	2,039	503	1,186 ¹²	Mar	1,099
Somerset Levels	1,520	1,806	971	713	396	Feb	1,081
Abberton Reservoir	(152)	604	606	566	918	Sep	674
Breydon Water & Berney Marshes	540 ¹²	754	570 ¹²	546 ¹²	568 ¹²	Nov	641
Dungeness and Rye Bay	553	581	588	735	506	Mar	593
Severn Estuary	600	796	526	497	426	Dec	572
Rutland Water	495	620	525	773	323	Sep	547
Thames Estuary	524	(227)	486	355	(352)	Mar	455
Medway Estuary	(509)	(156)	298	(51)	(105)	Sep	404 ▲
Sites of national importance in Great Britain							
Chew Valley Lake	300	180	270 ¹²	435	620	Oct	361
Ribble Estuary	532	188	478	271	346	Oct	363
Lower Derwent Ings	301	341	333	612	364	Mar	390
Swale Estuary	(144)	331	(216)	459	291	Jan	375
Nene Washes	448	384	272	330	79	Nov	303
North Norfolk Coast	380	258	297	309	282	Nov	305
Stodmarsh	400	147	284	220	254	Oct	261
Alde Complex	441	295	260	156	161	Jan	263
Crouch-Roach Estuary	(78)	(259)	330	227	200	Nov	254
Fairburn Ings	226	54	304	453	123	Dec	232
Pitsford Reservoir	329	148	148	349	362	Oct	267
Burry Inlet	101	309	(283)	300 ¹²	(61)	Feb	248
Middle Yare Marshes	(84)	(174)	(352)	174	(261)	Oct	240
R. Avon: Fordingbridge-Ringwood	153	312	245	245	122	Oct	216
Tees Estuary	309	170	225	300	151	Sep	231
Tring Reservoirs	130	256	250	219	182	Sep	207
Trinity Broad	(27)	338	162	(63)	220	Dec	240 ▲
Llynau Y Fali	135	59	419	213	208	Mar	207
Minsmere	218	138	157	171	340	Nov	205 ▲
Arun Valley	278	217	215	197	208	Feb	223
Grafham Water	170	157	121	200	268	Dec	183
Cotswold Water Park (West)	222	176 ¹²	251	184	87	Oct	184
Lee Valley Gravel Pits	164	184	145	222	229	Dec	189
London Wetland Centre	185	327	158	139	162	Feb	194
Loch Leven	279	205	192	80	273	Sep	206
Middle Tame Valley Gravel Pits	(68)	111	270	(10)	(10)	Feb	191
Theale Gravel Pits	157 ¹²	73	140	351	180	Feb	180
Sites of all-Ireland importance in Northern Ireland							
Strangford Lough	139 ¹⁰	73	69 ¹⁰	123	76	Dec	96
Loughs Neagh and Beg	34	90	57	32	47	Sep	52
Belfast Lough	15	28	49	31	14	Mar	28
Sites no longer meeting table qualifying levels in WeBS-Year 2010/2011							
Blagdon Lake	542	137	76	41	45	Nov	168
Staines Reservoirs	149	65	232	147	153	Dec	149
Morecambe Bay	174	22	326	38	38	Dec	160
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain							
Chichester Gravel Pits	(67)	78	(185)	128	291	Dec	171
King George VI Reservoir	40	26	42	61	290	Dec	92
North West Solent	152	108	125	131	255	Dec	154
Fleet and Wey	137	193	152	105	247	Dec	167
Colne Fen Gravel Pits	29	6	22	68	197 ¹²	Sep	64
North Warren & Thorpeness Mere	151	171	92	175	194	Jan	157
Aqualate Mere	49	164	58	135	188	Oct	119
Eastbourne Park Lakes	38	48	(69)	(65)	186	Feb	91

Ringed Teal

Callonetta leucophrys

Escape

Native Range: S America

Two were at Rumworth Lodge Reservoir in July and one was on River Lune in September.

Red-crested Pochard

Netta rufina

Naturalised introduction and vagrant

Native range: S & E Europe

GB max: 470 Nov
NI max: 0

Red-crested Pochard is a patchily distributed species throughout central and southern Europe. The majority of UK records, including those pertaining to the ancestors of the core of the population at Cotswold Water Park, are generally considered to relate to escapes. However, the species has shown a change in winter distribution in recent decades, involving a shift in range core from the western Mediterranean to the region north of the Alps and the use of a greater number of sites (Keller 2000), increasing the likelihood of wild birds reaching Britain.

In total, the species was recorded at 89 WeBS sites in 2010/11, exactly the same total as the previous year. These included two sites in Scotland (Castle Park and Loch Connell) and one on the Channel Islands (Les Mondrins GP).

In 2010/11, numbers reported from Cotswold Water Park were greater than the previous year and approached the all-time high noted in 2008/09. Although less rapid than the increase that has taken place in Switzerland (Keller & Müller 2012), Red-crested Pochard continues to steadily expand in terms of both population and range in England.

The species is now firmly established in the east Midlands and southeast England; the expansion away from the traditional stronghold exemplified by the WeBS maxima noted in 2010/11 at Sutton & Lound Gravel Pits (Nottinghamshire), Hanningfield Reservoir (Essex), Knight & Bessborough Reservoirs (London), and Thrapston Gravel Pits (Northamptonshire).

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites with mean peak counts of 10 or more birds in Great Britain							
Cotswold Water Park (West)	207	170 ¹²	327	252	205	Nov	232
Cotswold Water Park (East)	106	72	104	91	194	Dec	113
Lower Windrush Valley Gravel Pits	26	(26)	(36)	(90)	(32)	Jan	42
Rutland Water	10	8	13	84	58	Dec	35
Sutton and Lound Gravel Pits	22	13	10	42	88	Sep	35
St James's Park			22	32	25	Sep	26
Hanningfield Reservoir	17	10	11	21	33	Aug	18
Chimney Corner GP				17			17
Arnot Park Lake	16	14	9	9	6	Oct	11
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain							
Cheddar Reservoir	0	1	0	21	16 ¹²	Dec	8
Knight and Bessborough Reservoirs	0	0	0	0	16	Nov	3
Thrapston Gravel Pits			0	0	14	Dec	5
Hornsea Mere	0	0	0	1	14	Aug	3
Trinity Broad	0	0	0	0	10	Jan	2

¹ as no British or All-Ireland thresholds have been set a qualifying level of 10 has been chosen to select sites for presentation in this report

Common Pochard

Aythya ferina

GB max: 20,577 Jan
NI max: 5,075 Jan

International threshold
(N Europe population): 3,000
Great Britain threshold: 380
All-Ireland threshold: 380

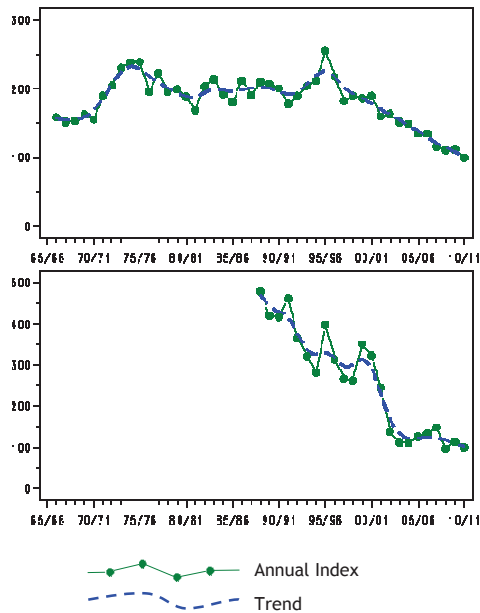


Figure 26.a, Annual indices & trend for Pochard in GB (above) & NI (below).

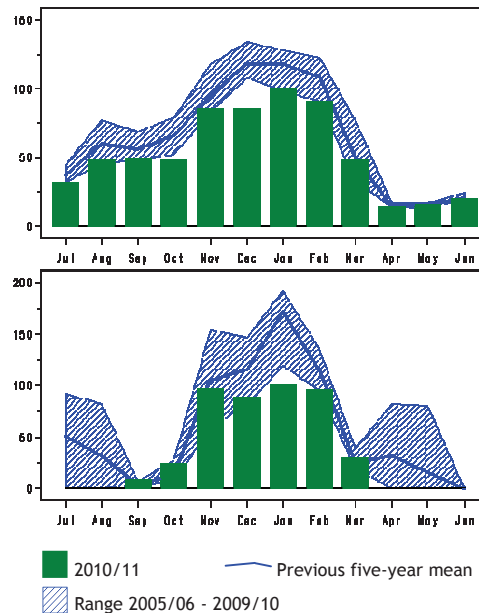


Figure 26.b, Monthly indices for Pochard in GB (above) & NI (below).

The trends for Pochard in both Britain and Northern Ireland indicate alarming declines have occurred since the 1990s. In 2010/11, the annual index for Britain reached an all-time low, with numbers approximately half of what they were twenty years ago. The precise mechanism driving both this decline and an apparent shift in distribution towards central Europe is uncertain, but it may be related at least in part to a changing climate. Pertinently, a similar decline has taken place in The Netherlands (Hornman *et al.* 2011), yet further east numbers have not fallen (e.g. Keller & Burkhardt 2011).

Pochard are very sensitive to frozen conditions (Keller *et al.* 2009). The monthly indices for Britain (and Northern Ireland) in 2010/11 show that numbers were particularly low in December during the onset of cold weather when the majority of freshwater wetlands were frozen. The species presumably responded similarly in other parts of Europe, and numbers are likely to have swelled further

south in the species' wintering range (but no data are yet available).

In Northern Ireland, after a slight recovery in peak numbers during the previous year, 2010/11 saw the lowest ever monthly maximum reported from Loughs Neagh & Beg. As recently as 1990/91 over 40,000 birds were counted at this site. The decline is considered primarily attributable to the effects of eutrophication which may have impacted on the invertebrates consumed by Pochard and other diving waterfowl (Maclean *et al.* 2006, Tomankova *et al.* in prep.).

Across Britain, virtually all the other major sites reported below average maxima, notable exceptions being Rutland Water, and both the Thames and Severn estuaries. The estimated international population size was recently revised downwards by 14% (Wetlands International 2012). Following the associated lowering of the threshold for international importance, Ouse Washes now qualifies as being internationally important for the first time.

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of international importance in the UK							
Loughs Neagh and Beg	8,884	9,023	5,799	9,288	5,002	Jan	7,599
Ouse Washes	4,197	2,987	2,367 ¹²	3,151 ¹²	2,461 ¹²	Feb	3,033 ▲
Sites of national importance in Great Britain							
Loch Leven	3,666	1,650	4,326	1,281	1,300	Sep	2,445
Abberton Reservoir	3,167	2,355	850	1,134	1,306	Sep	1,762
Dungeness and Rye Bay	1,049	728	1,019	1,356	979	Aug	1,026
Chew Valley Lake	1,220	600	530	1,065	1,305	Nov	944
Fleet and Wey	879	980	718	674	921	Dec	834
Thames Estuary	484	854	588	714	(907)	Dec	709
Middle Tame Valley Gravel Pits	296	783	1,042	(18)	(11)	Nov	707
Loch of Harray	532	468	454	1,184	754	Nov	678
Cotswold Water Park (East)	993	884	685	421	379	Dec	672
Severn Estuary	786	583	617	593	(734)	Jan	663
Cotswold Water Park (West)	(641)	553	568	639	489	Nov	578
Hornsea Mere	710	650	560	550	410	Mar	576
Cheddar Reservoir	443	80	230	435	1,215 ¹²	Dec	481 ▲
Lower Windrush Valley Gravel Pits	467	(409)	(316)	(312)	(207)	Feb	467
Loch of Boardhouse	623	441	665	312	71	Oct	422
Brogborough Clay Pit				645	147	Nov	396
Pitsford Reservoir	365	505	328	407	335	Sep	388
Hanningfield Reservoir	463	226	538	323	375	Dec	385 ▲
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain							
Rutland Water	233	291	352	274	504	Dec	331

Ring-necked Duck

Aythya collaris

Vagrant
Native Range: N America

Ring-necked Ducks were recorded at nine sites; Loch Gelly (Jul), Chew Valley Lake (Sep-Nov), Kirkby-on-Bain Gravel Pits (Oct), Bardney Pits (Nov), Nosterfield Gravel Pits (Dec-Jan),

Dornoch Firth (Feb), Bosherston Lakes (Feb), Talley Lakes (Feb-Mar), and Stithians Reservoir (Mar-Apr).

Ferruginous Duck

Aythya nyroca

Vagrant and escape
Native Range: N America, Asia

Ferruginous Ducks were seen at eight sites in England. Records from Chew Valley Lake, where the species may have bred in recent years (Davis & Vinicombe 2011), included three present in October. Other records were from Minsmere

(Jul-Aug), Woburn Park Lakes (Sep), Winterset & Cold Hiendley Reservoirs (Oct), Trinity Broads (Nov), Leathes Ham (Dec), Queen Mary Reservoir (Dec) and Lakenheath Fen (Feb). Typically, some may have been escapees.

Tufted Duck

Aythya fuligula

International threshold
(NW Europe population): 12,000
Great Britain threshold: 1,100
All-Ireland threshold: 370

GB max: 61,795 Jan
NI max: 11,379 Feb

Annual maxima and indices for Tufted Duck in Britain have exhibited a shallow increase over the course of the last forty years. In northern Europe, the species has responded strongly to climate change, with wintering numbers in Scandinavia having increased exponentially in the last three decades in response to ice-free conditions (Lehikoinen *et al.* in prep.). No strong

response was detected in Britain in 2010/11 despite freezing midwinter conditions that prevailed across north-west Europe in November, December and January. However, a marked increase in numbers in Northern Ireland during February 2011 may be linked, to some degree, to a shift in distribution in response to weather conditions during winter 2010/11.

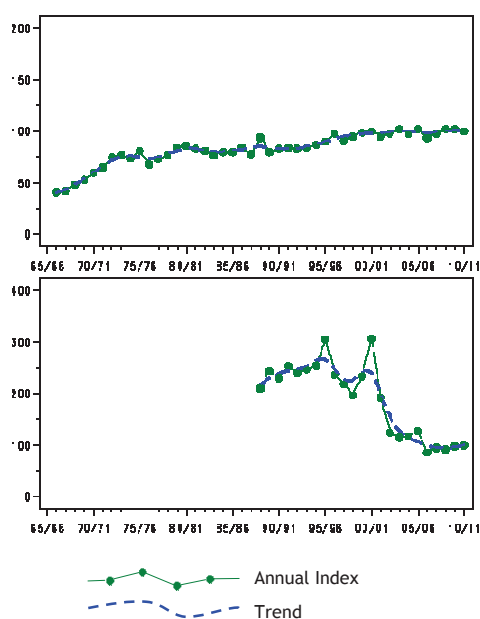


Figure 27.a, Annual indices & trend for Tufted Duck in GB (above) & NI (below).

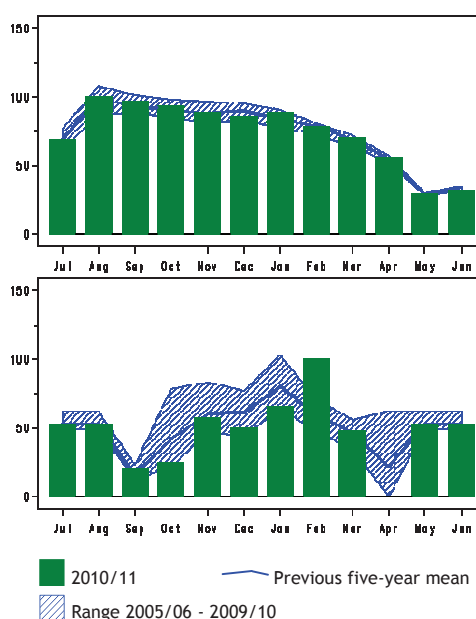


Figure 27.b, Monthly indices for Tufted Duck in GB (above) & NI (below).

In 2010/11, the peak at Rutland Water was consistent with the recent average but that at Abberton Reservoir was the lowest for four years. The associated drop in five-year average at Abberton means the site is leap-frogged by Loch Leven in the table of sites below, where the peak of 6,455 in September was the most ever seen there. Among the ten further sites that surpass the threshold for national importance, Ouse Washes yielded its lowest maximum for seven years. In contrast, the October peak at Chew Valley Lake, where waterbirds have been monitored for over 50 years, was the most ever.

In Northern Ireland, the February peak of 8,078 at Loughs Neagh & Beg was consistent with the previous year. In common with other diving ducks, a sharp drop in numbers of Tufted Ducks took place at the site from 2001/02 onwards, but recent colder winters appear to have resulted in a degree of stability in the Northern Irish trend. The record WeBS count of 29,393 dates back to December 1989. In contrast, continuing the trend of recent years the maximum at Upper Lough Erne, 2,836 in February, represented a new high for that site.

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of national importance in Great Britain							
Rutland Water	9,758	5,134	3,678	7,216	5,449	Jan	6,247
Loch Leven	3,553	4,140	3,610	3,601	6,455	Sep	4,272
Abberton Reservoir	1,187	3,796	3,928	5,078	2,790	Sep	3,356
Ouse Washes	2,057	3,328	(2,978)	1,647	1,548	Mar	2,312
Middle Tame Valley Gravel Pits	1,243	1,766	3,372	(162)	(68)	Mar	2,127
Hanningfield Reservoir	2,194	486	3,269	2,275	1,596	Aug	1,964
Chew Valley Lake	1,325	1,480	1,350	1,480	2,420	Oct	1,611
Walthamstow Reservoirs	1,516	900	2,103		1,873 ¹²	Jul	1,598
Grafham Water	521	1,464	1,591	2,242	1,815	Dec	1,527
Lee Valley Gravel Pits	1,215	1,231	1,519	1,673	1,565	Nov	1,441
Cotswold Water Park (West)	1,372	1,343	1,354	1,541	1,445	Mar	1,411
Pitsford Reservoir	1,374	774	1,654	1,749	1,164	Aug	1,343
Staines Reservoirs	1,865	1,074	1,097	730	1,097	Aug	1,173

	06/07	07/08	08/09	09/10	10/11	Mon	Mean
Sites of all-Ireland importance in Northern Ireland							
Loughs Neagh and Beg	6,441	6,076	5,126	8,968	8,078	Feb	6,938
Upper Lough Erne	1,478	1,772	1,895	2,240	2,836	Feb	2,044
Lower Lough Erne	705	638	(183)	(201)	(455)	Jan	672
Sites below table qualifying levels but exceeding threshold in WeBS-Year 2010/11 in Great Britain							
Woolston Eyes	377	370	580	392	2,600 ¹²	Jan	864
Sonning Eye and Henley Road GPs	886		649	879	1,533	Jan	987
Queen Mary Reservoir	6	372	65	186	(1,325)	Dec	391
Loch of Stenness	351	597	250	112	(1,165)	Dec	495

Scaup

Aythya marila

GB max: 1,831 Dec
NI max: 2,763 Nov

International threshold
(N Europe population): 3,100
Great Britain threshold: 52
All-Ireland threshold: 45

*50 is normally used as a minimum threshold

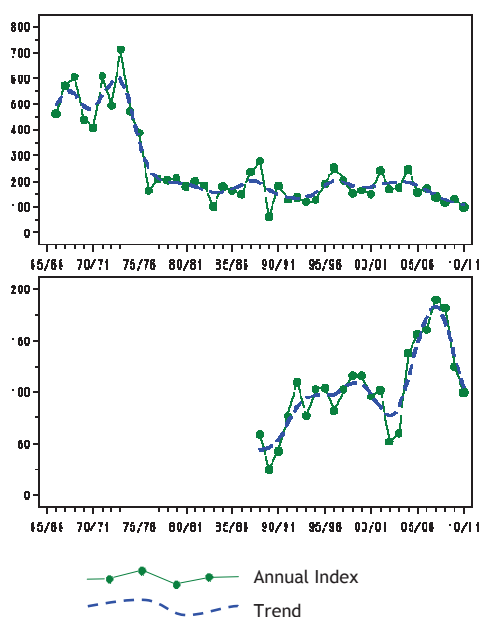


Figure 28.a, Annual indices & trend for Scaup in GB (above) & NI (below).

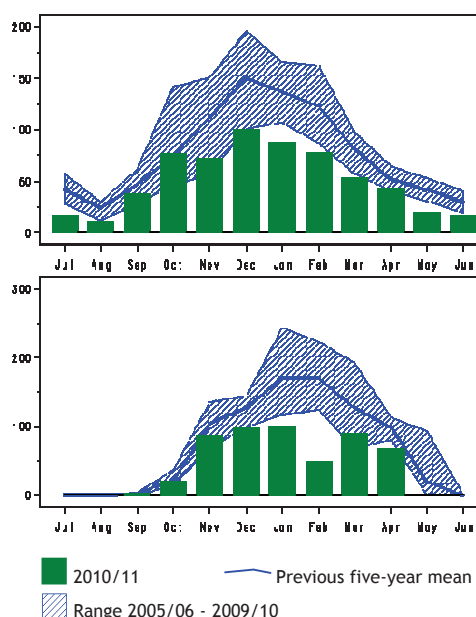


Figure 28.b, Monthly indices for Scaup in GB (above) & NI (below).

Following a relative period of stability, the WeBS trend for Britain indicates a shallow decline in the number of Scaup over the last seven years. However, as with all seabirds, there is an inherent susceptibility to the effects of bad weather and associated poor viewing conditions; interpretation of Scaup totals therefore needs to be undertaken with caution. This contemporary situation is in contrast to that prior to the mid 1970s when up to 25,000 birds were regular on the Forth Estuary. The disappearance of that aggregation was largely responsible for the rapid drop in the value of the national index at the time, occurring in

isolation from the stable trend elsewhere in the country. Parts of the Scottish coastline suffer from sporadic, incomplete, or indeed no WeBS coverage. For example, a supplementary count of 4,000 birds at Solway Estuary in January 2010 provides an indication of the potential numbers not routinely monitored through the survey.

Typically, the maximum WeBS Core count of the year emanated from Loughs Neagh & Beg in Northern Ireland. Up until 2009/10, the wintering population at that site had been on an upward trend considered to be associated with the recovery of the Icelandic breeding population. However, for two successive years