Recovery of breeding populations of Skylark Alauda arvensis, Wren Troglodytes troglodytes, Stonechat Saxicola rubicola and Meadow Pipit Anthus pratensis after the extreme cold winters of 2009/10 and 2010/11 at Bellacorick cutaway bog, County Mayo

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Baseline breeding bird surveys were carried out at the Bellacorick cutaway bog, Co. Mayo between 2009 and 2016 (apart from 2014), Marked fluctuations in the breeding populations of four species, Skylark Alauda arvensis, Wren Troglodytes troglodytes, Stonechat Saxicola rubicola and Meadow Pipit Anthus pratensis, are considered to have been caused primarily by the effects of winter weather and specifically air temperature. The first two winters in the period (2009/10 and 2010/11) were notable as being exceptionally cold, with snow a feature. The following five winters, however, were characterised as mild. Stonechat was the species most affected by the cold weather, with a total collapse of the breeding population in 2010, some recovery in 2012 and near full recovery by 2013. The Meadow Pipit population was heavily affected after the first cold winter (down 79%) and was still at a relatively low level in 2012 but had exceeded the 2009 baseline by 2013. The Wren population declined by 66% after the two cold winters, remained low in 2012, but by 2013 had substantially exceeded the 2009 level. Skylark was the species least affected by the cold weather, with the population falling by 22% after the two cold winters but recovering fully by 2012. Numbers of all four species in 2015 were substantially higher than the baseline numbers of 2009. The vulnerability of each of the species to extreme cold weather is discussed, along with the strategies adapted by each species to cope with cold weather events.

Introduction

The impact of the extreme cold winter of 2009/10 on the breeding populations of four passerine species, Skylark *Alauda arvensis*, Wren *Troglodytes troglodytes*, Stonechat *Saxicola rubicola* and Meadow Pipit *Anthus pratensis*, at the Bellacorick cutaway bog in County Mayo has been described

by Lovatt and Madden (2012). Ireland experienced a further winter with mean air temperatures lower than average in 2010/11, but thereafter a series of relatively mild winters. This

Plate 177. Large areas of the cutaway bog are now dominated by rushes and common bog cotton. Areas of bare peat remain (B.Madden).

Irish Birds 10: 359–364 (2016) 359

paper documents the recovery of the populations of these four species in the breeding seasons up to 2016 (apart from 2014 when no survey took place) since the two cold winters. The study was carried out as part of a breeding bird survey to support the environmental impact assessment for the Oweninny Wind Farm project (Phases 1 & 2 granted permission by An Bord Pleanála in 2016 – Planning reference PA0029).

The Bellacorick cutaway bog study site (Grid reference F980230) has been described in Copland *et al.* (2011) and Lovatt and Madden (2012). Briefly, the site, which is part of the Oweninny Bog Group, comprises an extensive area (about 5,000 ha) of cutaway bog that is in the process of re-vegetation since peat harvesting by Bord na Móna ceased in 2003. The cutaway bog habitats vary from bare peat to rush dominated flats, with incipient fen and bog vegetation as well as shallow ponds and lakes. There are remnants of uncut blanket bog throughout the site and several stands of conifer plantation (planted in the 1980s).

Methods

A transect selected in 2009 by Copland *et al.* (2011) was used throughout the study period. This is a single transect which traverses the site from west to east and passes through all the main habitats within the site. The transect is mostly along the embankments for the former Bord na Móna rail line. It is divided into 26 sections, based on physical features such as track junctions or bends. The total length of the route is 17.87 km.

Following the initial baseline survey in 2009 by Copland *et al.* (2011), breeding bird surveys were carried out in each of the years 2010 to 2016 (apart from 2014 when no survey took place). Two rounds of survey were carried out in each year, corresponding to early season and late season visits, as follows:

2010: 24/25 May & 20/21 June 2011: 2/3 June & 27/28 June 2012: 27/28 May & 19/20 June 2013: 30/31 May & 24/25 June 2015: 8/9 June & 1/2 July 2016: 13/14 May & 14/15 June Visits were made during suitable weather conditions for detecting singing birds (i.e. low to moderate wind <F3, dry or mostly dry). On each occasion this transect was surveyed in sections, and all birds seen or heard to either side were recorded. Most registrations of birds were within a 200 m distance band from the transect line.

Results

Breeding data for each of the four species during the breeding seasons of 2009 to 2016 (apart from 2014) are presented in Table 1 and Figure 1. The complete collapse in the population of Stonechat and the marked decline in the population of Meadow Pipit and to a lesser extent the populations of Skylark and Wren after the prolonged cold winter of 2009/10 has been discussed by Lovatt and Madden (2012).

After a second cold winter in 2010/11, the breeding population of Stonechat showed no recovery in the summer of 2011, while a further marked decline occurred in the Wren population (down 55% on the previous year), and a further small decline in the Skylark population. The population of Meadow Pipit increased by 74% since the previous summer (2010), though the population was still 64% lower than that in 2009. By 2012, the Skylark breeding population surpassed the 2009 numbers with a 6% increase. The Wren population showed a dramatic increase (144%) on 2011, though numbers were still below the 2009 level. The Meadow Pipit breeding population almost doubled in 2012 over 2011, though it was still 32% below the 2009 population. Stonechat showed a welcome return in 2012, with seven birds recorded (compared to 17 in 2009). By 2013, the populations of Skylark, Wren and Meadow Pipit had fully recovered back to 2009 figures or better, with substantial increases in the Skylark and Wren populations. The Stonechat number in 2013 (15) was still a little less than it had been in 2009 (17). With no survey in 2014, the breeding populations of all four species in 2015 were higher than in the baseline year of 2009. The increase for Wren (193%) was particularly striking but with marked increases also in Skylark (64%) and Meadow Pipit (48%). The Stonechat population was at 21 birds compared to 17 in 2009. The breeding populations remained at high levels in 2016 though all four species showed some decline since 2015.

Table 1. Numbers of birds recorded along the survey transect in summers 2009 to 2016 at Bellacorick cutaway bog, Co. Mayo (no survey was carried out in 2014).

Species	2009	2010	2011	2012	2013	2014	2015	2016
Skylark	67	59	53	71	95	nc	110	104
Wren	27	20	9	22	42	nc	79	67
Stonechat	17	0	0	7	15	nc	21	20
Meadow Pipit	205	42	73	140	222	nc	304	275

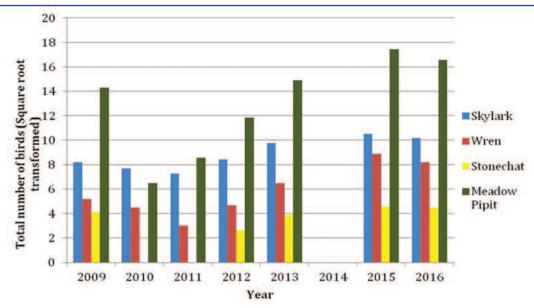


Figure 1. Breeding bird population patterns for each of the survey years at Bellacorick cutaway bog, Co. Mayo. The total number of birds has been transformed using a square root transformation to allow visual comparison (after Whitlock & Schluter 2014). Data for actual numbers recorded are presented in Table 1 (no survey was carried out in 2014).

Discussion

Elkins (1995) describes the effects of extreme winter weather on bird populations and notes that some of the wintering birds in the milder northern maritime climates are less well equipped than those in more continental climates to withstand the results of prolonged cold, and in very severe winters some populations are markedly reduced. He states that some species can avoid severe weather by moving to a more optimal environment and that even species that do not emigrate are able to recover population losses usually within three to five years.

It is considered that the marked fluctuations between 2010 and 2016 in the breeding populations of the four passerine species at Bellacorick bog can be related largely or entirely to the winter weather in the study period. It is noted that there were no noticeable changes in habitats or landuse activities on the site in the period that might have contributed to the recorded fluctuations in the breeding populations.

Summary of winter weather, 2009/10 to 2015/16

A summary of air temperature variables at Belmullet Synoptic Weather Station, Co. Mayo for the winters 2009/10 to 2015/16 is presented in Table 2. Of particular interest is the temperature difference from the long term (30 year) average

for each winter and this is also shown in Figure 2. Briefly, the winter of 2009/10 was exceptionally cold with the most extreme cold spell over Ireland since 1963 occurring between mid-December 2009 and early January 2010. Snow was a feature of the winter, with a particularly heavy fall in mid-January. The winter of 2010/11 was another exceptionally cold one over Ireland, with mean air temperatures for the winter season well below normal throughout the country, by

Table 2. Variables in air temperature (C°) at Belmullet Synoptic Weather Station, Co. Mayo for winters 2009/10 to 2015/16. Mean temperatures, differences from long term averages (LTA), and extreme minimum temperatures are given. Winter is defined as the three month period December to February. Data from Met Éireann *Monthly Weather Bulletins* (2011-2015).

Winter	Mean	Difference from LTA	Extreme minimum
2009/10	4.6	-1.4	-5.6
2010/11	5.1	-0.9	-7.6
2011/12	7.9	+1.4	-1.0
2012/13	6.5	0.0	-3.0
2013/14	7.0	+0.5	0.6
2014/15	6.5	+0.1	-1.1
2015/16	6.9	+0.4	-1.3

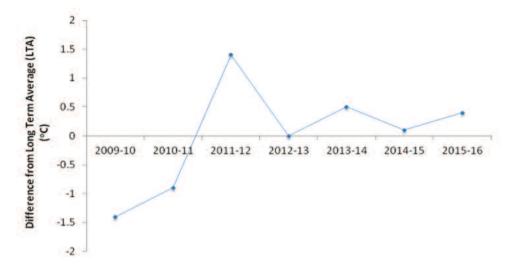


Figure 2. Air temperature difference from Long Term Average (LTA) (C°) for each winter of the survey period at Belmullet Synoptic Weather Station, Co. Mayo.

between one and two degrees generally. December was one of the coldest months on record in Ireland, while cold spells also dominated during January. Precipitation during most of December was in the form of snow (Met Éireann 2011).

In contrast, winter 2011/12 was noted as being warm and dull, with mean air temperatures throughout Ireland for the winter season above average (Met Éireann 2012). The following winter, 2012/13, was described as cold and dull (Met Éireann 2013). While the majority of mean air temperatures for the 2012/13 winter season in Ireland were below the long term averages, temperatures at or above the long term averages were recorded in parts of the western half of the country. A further mild winter was experienced throughout Ireland in 2013/14 it being wetter and windier than normal, but with temperatures near or above average in most places (Met Éireann 2014). Over half of weather stations reported that their winter temperature minima were the highest on record. Winter 2014/15 in Ireland was characterised by variable mean temperatures, rainfall and sunshine (Met Éireann 2015). While nearly all mean temperatures were below their long term average for winter, exceptions were reported from several west coast stations, including Belmullet. Yet another milder than normal winter was experienced throughout Ireland in 2015/16, with nearly all seasonal mean air temperatures above their long term averages met.ie/climate/monthly-data.asp).

Population fluctuations and survival strategies

The severe winter of 2009/10 wiped out the resident Stonechat population and caused a dramatic collapse in the Meadow Pipit population. The Wren population survived the cold spell relatively well, with the Skylark population the least affected. As expected, following a second severe winter in 2010/11 the populations in summer 2011 remained at low levels. However, a marked decline in the Wren population in summer 2011 may have been due to more extreme minimum temperatures in winter 2010/11 than in the previous winter. By the summer of 2012 the effects of the severe winters of 2009/10 and 2010/11 were no longer apparent in the Skylark population and a significant recovery had occurred in the Wren and Meadow Pipit populations. The Stonechat, however, while having re-established itself on site after an absence of two years, still occurred in relatively low numbers compared to the 2009 totals. By the summer of 2013, the effects of the two severe winters were no longer apparent in the populations of Skylark, Wren or Meadow Pipit (all populations in fact were higher than in 2009) and the Stonechat population was close to the numbers recorded in 2009.

With increased populations of all four species recorded in 2015 (compared to 2013) and high numbers being maintained in the summer of 2016, it is likely that the recent breeding success of these bird populations can be at least partly attributed to the run of mild winters since 2011/12. The comparable breeding surveys carried out at the Bellacorick



Plate 178. Parts of the cutaway have developed as wetland habitat, with permanent lakes and ponds (Brian Madden).

cutaway bog between 2009 and 2016 have shown that while small bird populations can be dramatically impacted by severe winters, full recovery can be achieved within a period of two to three breeding seasons following a run of mild winters.

The study also shows that the rates of decline and recovery vary somewhat between species. Of the four species, Stonechat was the most affected by the two severe winters with a total wipe-out of the population in the breeding seasons of 2010 and 2011. The Stonechat population within Ireland and Britain is particularly vulnerable to cold weather, reflecting its loyalty to well defined territories throughout the year (though local movements can occur to avoid extreme cold spells) and the largely insectivorous feeding habits of the species (Lack 1986, Hutchinson 1989). The Bird Atlas 2007-11 showed a similar pattern of losses in the Stonechat population throughout Britain and Ireland following the cold winters (Balmer et al. 2013). By 2012 the population at Bellacorick was still less than half what it had been in 2009 though it had almost recovered by 2013 (the third breeding season since the cold winters) and went on to exceed the 2009 baseline by 2015.

The Meadow Pipit in Ireland is considered to be a partial migrant, with birds in winter deserting the mountains for the lower-lying parts and the milder south of the country (Hutchinson 1989). While Lack (1986) stated that severe weather, especially with snow-cover, has been known to generate cold-weather movements in the British and Irish populations, an analysis of ringing data by Wernham *et al.* (2002) was unable to confirm that such movements can extend to Brittany and Spain (as reported by Lack (1986)). With the present data showing a marked population decline in the breeding population at Bellacorick after the severe winters of 2009/10 and 2010/11, it can be assumed that the freezing temperatures were responsible for high mortality within populations wintering locally or elsewhere in Ireland. For Meadow Pipit, the breeding population was still at a relatively low level in 2012 (the second breeding season since the two cold winters) but had exceeded the 2009 baseline by 2013 and continued to increase up to 2015.

The Wren, which feeds mostly on spiders and insects, is largely a sedentary species in Britain and Ireland, and is exceptionally vulnerable to extreme cold or to conditions which prevent feeding even for short periods (Lack 1986, Wernham *et al.* 2002). However, a high reproductive potential may allow the population to recover from cold weather mortality after as few as two breeding seasons (Garson 1980). By 2012 (the second breeding season since the two cold winters) the Bellacorick population was still below (by 19%)

the 2009 baseline level but by 2013 had substantially exceeded the 2009 level. The population changes shown by Wren in response to the severe winters and the subsequent series of relatively mild winters can be considered very typical of the species.

The Skylark appears to have been least affected by the cold weather probably as it had migrated from the exposed bog habitats in the autumn and early-winter period before the cold weather set in. Hutchinson (1989) stated "In winter the numbers of Skylarks are much reduced, especially on higher ground and in the north-west... There are clear signs that the birds concentrate near and on selected parts of the coast and in the cereal growing counties of the south-east". In the United Kingdom, Wernham et al. (2002) considered that the breeding Skylark population appears to be largely resident, although at least part of the population of the Northern Isles migrates to southern England. Donald (2004) noted that due to the increased risks of hard weather, particularly prolonged snow-lie, on a bird that can feed only on the ground, Skylarks regularly undertake nomadic movements within winters in response to weather patterns. Indeed, winter site surveys at the Bellacorick site in the 2011 to 2013 period (using the same transect as for the breeding surveys) did not record any Skylarks on the cutaway bog between 13 October 2011 and 6 February 2012 and between 17 October 2012 and 20 February 2013. The lower numbers of breeding birds in summers 2010 and 2011 indicates that some Skylarks may have perished on wintering grounds elsewhere in Ireland during the two severe winters.

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Wintering birds in a garden provided with food, 2002/03 to 2012/13

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Thirty-six species were observed taking provided food within a small Dublin garden over the 11 winters of 2002/03 to 2012/13. The most frequently recorded species were



Chaffinch Fringilla coelebs, House Sparrow Passer domesticus, Feral Pigeon/Rock Dove Columba livia, Starling Sturnus vulgaris, Greenfinch Chloris chloris, Goldfinch Carduelis carduelis, Blackbird Turdus merula and Jackdaw Corvus monedula.

Introduction

The feeding of birds in winter has long been a pleasant activity, but whilst many publications explain how to do so (O'Sullivan & Wilson 2008), with the exception of Crowe's (2005) findings from 1,648 gardens nationwide over ten years, information on what one will discover from the exercise remains scarce. Ní Lamhna et al. (2012) give a brief survey of the characteristics of the suburban environment, a habitat preferred by some species, a point well demonstrated by Gedeon et al. (2014) who show increased densities of many species in that environment, for example Blue and Great (but not Coal) Tits, and Blackbird (but not Song Thrush), thus giving some clues as to which birds actually prefer life there (scientific names of species discussed appear after their English names in the 'Species accounts' section).

This paper describes the feeding of birds during December, January and February from 2002/03 to 2012/13 as part of the BirdWatch Ireland (BWI) Winter Garden Bird Feeding programme. It was felt that, whilst BWI published annually a 'League Table' type list of species recorded in all contributing gardens in Ireland (e.g. BirdWatch Ireland 2016), it might be interesting to report in greater detail on the activities of the birds in a single garden over a period of 11 winters.

The garden in question was a typical back garden in the south Dublin suburbs, roughly square in shape $(16\ m\ x\ 14\ m)$ at the rear of and east of the owner's house with, on the north side, a straight path and long narrow flowerbed backed by a wall covered with *Clematis* sp. and Ivy *Hedera helix*. Fruit trees with a row of gooseberry bushes under and behind them grew at the back. The south side had a variety of bushes, forming a larger cluster at the south-east corner, which was valued as shelter by the birds, with a patch of ground covered by fallen leaves popular with Dunnock and Song Thrush.

The winter weather was fairly normal most of the time during the period under review, with two notable exceptions, the winters of 2009/10, when there was heavy snow around 1 January, which persisted for a number of weeks, and at the end of 2010, when non-drifted snow reached a depth of 26 cm, which brought in two species only seen during this period (Mediterranean and Common Gull), whilst Fieldfare, Redwing and Brambling reached their highest numbers and made their longest visits during this time.

Plate 179. House Sparrow (M.O'Clery).

Irish Birds 10: 365–372 (2016) 365

Methods

Viewing of birds was carried out from a window facing out over the back garden with venetian blinds and a large sheet of stiff cardboard with a hole cut in it to allow observation including with X10 binoculars. Initially, observations of between 50 and 65 days over December, January and February were carried out, but after four winters this was found too onerous, and reduced to 30 to 35 days, with the proviso, however, that the observation per day must exceed two hours (not necessarily continuous, and occasionally making up the two hours with observations of two days combined).

The aim of the project was to maximise species diversity, hence larger birds, e.g. gulls and corvids were not discouraged from visiting the garden, and with the exception of urban feral Rock Doves in the latter years no species really achieved nuisance status due to weight of numbers. A fairly standard selection of food bought at a pet store, e.g. peanuts, sunflower seed and 'fat-balls' (round balls of fat impregnated with various seeds (about 10 cm and 5 cm diameter), was used throughout the study period. The small 'fat-balls' were fitted four or five together into metal hanging feeders, whilst the large ones were hung from branches of the fruit trees by string, later replaced by wire in an attempt to minimise damage by Grey Squirrels Sciurus carolinensis, which were a nuisance in the cold winters and for some years after. These food items were supplemented with slices of brown wholegrain bread and, from 2009 onwards, nyjer seed which was very effective in attracting not merely Goldfinches, but also Siskins, Lesser Redpolls and, late on in the period, Linnets.

The bird table was found to have limitations for small birds, and the ground feeding species in general preferred the areas under hanging feeders, probably due partly to their closer proximity to cover. When present, the larger corvids and gulls used the table frequently, apparently because the wary corvids appreciated its better view of the surroundings, and for gulls, more accustomed to open spaces, its elevation allowed quicker touching down and taking off. To avoid encouragement of rodents, bread was put out only early in the morning and whilst it was planned to collect any that remained around lunchtime, in practice, there was hardly ever any to be found; feral Rock Doves, House Sparrows, Starlings and, when visiting, corvids and gulls consumed it greedily. Apples were avidly consumed by Blackbirds, Blackcaps, Fieldfares and Redwings; as with bread on the ground they were pinned down by small wire hoops in an attempt to minimise their removal by birds, but like bread on the ground, they still vanished almost as quickly. Water was provided in a brown plastic basin on the lawn, with a brick 'island' for perching on, and any ice forming was broken in the early morning. Starlings and occasionally Goldfinches were the main client species of this facility.

Results and discussion

Different aspects of the results of the study are illustrated in the tables. Table 1 shows, in descending order of abundance, annual variations in the number of each species observed in the garden study area. These data have been adjusted to a base of 30 days (the mean length of a month) to remove the effect on the data of inter-annual variation in numbers of days spent observing during the period of the study.

Thirty-six species were observed feeding within the garden and three further species by not alighting within the garden area failed to qualify for inclusion in the list, although present in its vicinity in January 2005, Mistle Thrush *Turdus viscivorus* and Waxwing *Bombycilla garrulus*, and in February 2011, two Ravens *Corvus corax* flew over. The garden study area had no bushes bearing red berries, and a young Rowan *Sorbus aucuparia* had only pale pink ones which surprisingly failed to attract any birds at all.

Table 2 shows the number of species observed by month and by year. The table implies a learning curve at both monthly and yearly levels as birds presumably became aware of the presence of food, as shown in 2002/03, and to some extent in 2003/04, with the mean values increasing from December through to February. In seven of the eleven years of the study, December had the lowest mean values, although an exception was the snowy December of 2010. The highest level reached during the study was 22 species in that month, followed by 21 in February 2012 and two months, January and February 2009, with 20 species each; of these months, only December 2010 had any rarities, in the others, simply more irregular species than usual turned up simultaneously.

The results also showed for the 15 species present on more than 50% of days watched, and to a lesser extent the seven present on between 50% and 10% of days watched, that there was a marked contrast between gregarious species present in relatively high and often somewhat variable numbers, and species also frequently present but always in low numbers, suggesting (though not proving) a territorial habit for the winter feeding season. Tables 3 and 4 illustrate this, using the ratio of maximum flock numbers to percentage of days present to show how it applies to all species present on over 50% of days watched, and also, but to a lesser extent, to those present on over 10% but under 50% of days watched. All the more numerous finches belonged to the 'gregarious' group, whilst tits, other than Long-tailed Tit, plus Blackbird, Robin and Dunnock, were of the apparently 'territorial' group. In the case of the Blue and Great Tit, both with two as the usual maximum number in sightings, the situation differed from that in southern England where both have been observed to be quite gregarious at feeding stations (see Perrins 1979 and Moss & Cottridge 2000); denser populations there than in the Dublin area (where it is denser than in

Table 1. Number of sightings of species per 30 days, by year, in descending order of abundance. Two exceptionally cold winters are shown in bold font.

Winter	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	Total	Mean
Days watched	54	63	51	54	33	35	34	34	36	33	30	457	41.5
Chaffinch	115	128	76	268	237	223	191	271	248	348	308	2412	219.3
House Sparrow	126	183	256	211	317	213	194	238	180	259	144	2321	211.0
Feral Pigeon	45	67	107	162	215	134	91	87	160	351	352	1771	161.0
Starling	65	200	128	85	198	246	194	151	152	135	72	1625	147.7
Greenfinch	137	70	83	178	229	109	78	48	86	255	232	1503	136.6
Goldfinch	20	12	65	31	24	76	94	250	266	266	188	1292	117.5
Blackbird	46	61	42	76	65	53	55	71	73	55	49	644	58.6
Jackdaw	8	12	21	57	32	86	73	64	39	82	99	573	52.1
Lesser Redpoll	11	8	21	12	11	9	20	58	151	124	22	447	40.6
Magpie	21	35	65	32	42	45	48	59	38	34	29	447	40.6
Woodpigeon	16	39	39	27	22	33	71	59	41	39	52	439	39.9
Blue Tit	27	32	49	37	42	34	41	37	16	36	30	381	34.6
Coal Tit Great Tit	17 12	31 21	35 26	40 39	34 13	9 18	45 25	11 11	16 40	31 30	52 29	321	29.1 23.9
Siskin	37	20	∠6 5	53	6	25	25 9	2	40 5	5	29 93	263 260	23.9
Robin	23	20 18	25	13	30	32	35	15	18	26	13	248	23.6
Dunnock	17	24	21	27	20	27	12	31	42	25	2	246	22.4
Blackcap	20	5	1	1	2	1	22	23	10	22	35	142	12.9
Rook	1	0	1	5	3	18	19	27	43	6	6	128	11.7
Linnet	0	0	0	0	0	0	0	0	21	28	40	89	8.1
Collared Dove	1	2	0	31	25	22	6	1	0	0	0	88	8.0
Long-tailed Tit	5	1	4	2	3	2	28	0	0	5	16	66	6.0
Song Thrush	3	1	1	4	0	0	5	17	12	0	0	43	3.9
Redwing	3	0	1	0	3	1	6	14	4	0	0	32	2.9
Hooded Crow	0	0	0	1	1	0	3	1	3	13	2	24	2.1
Black-headed G	ull 0	0	0	0	2	1	1	3	8	3	0	17	1.6
Goldcrest	1	0	0	3	1	0	5	2	0	0	2	14	1.3
Bullfinch	2	0	2	0	2	0	0	1	6	0	1	14	1.3
Brambling	0	0	0	1	0	1	0	0	6	5	1	13	1.2
Wren	0	1	6	1	2	0	0	0	2	1	0	13	1.2
Sparrowhawk	0	1	2	2	0	0	1	0	0	1	3	10	0.9
Herring Gull	0	0	0	0	0	3	1	0	3	1	1	9	8.0
Fieldfare	0	0	1	0	0	0	0	4	4	0	0	8	8.0
Common Gull	0	0	0	0	0	0	0	0	3	0	0	3	0.3
Carrion Crow	0	0	1	0	0	0	0	0	0	0	0	1	0.1
Mediterranean G	aull 0	0	0	0	0	0	0	0	1	0	0	1	0.1
Total	777	971	1083	1399	1579	1420	1373	1556	1694	2183	1873	15908	

Ireland generally) being clearly shown in Lack's (1986) maps. However, this was not the case with the woodland-loving Coal Tit.

Territoriality is not assumed to be proved except where conflict was observed (see Species accounts), as it was with Woodpigeon and, with considerable violence, the Magpie. The Blackbird was somewhat border-line in this respect, whilst much the most frequently observed number was two, occasionally three or more would be recorded on the same day, and such occurrences usually yielded much increased vocal action. For the less frequently observed birds in this category it could be argued that the low numbers simply result from locally prevailing low population density.

Table 2. Number of species by winters and months: extreme (low and high) and mean values.

Winter		Decembe	er		January	/		Februar	у	Overall Mean
	Low	Mean	High	Low	Mean	High	Low	Mean	High	(unweighted)
2002/03	6	8.6	11	4	10.5	17	6	13.5	17	10.87
2003/04	9	10.7	15	5	11.0	16	7	13.5	17	11.74
2004/05	11	12.5	17	10	13.0	17	13	15.5	18	13.67
2005/06	9	15.3	18	9	15.7	18	13	13.5	17	14.82
2006/07	11	13.5	16	10	13.8	17	12	14.0	17	13.75
2007/08	13	15.2	18	12	13.8	17	12	15.2	18	14.75
2008/09	12	15.6	18	15	17.1	20	15	17.5	20	16.76
2009/10	12	14.8	18	13	16.2	19	13	15.5	18	15.49
2010/11	14	17.7	22	14	16.8	19	14	15.7	18	16.72
2011/12	14	16.4	19	15	17.2	19	15	18.2	21	17.25
2012/13	13	16.4	19	14	16.5	19	13	16.5	18	16.50
Mean	11.3	14.2	17.4	11.0	14.7	18.0	12.1	15.3	18.1	14.8

Species accounts

Sparrowhawk *Accipiter nisus* Single Sparrowhawks swept into the garden on one or two occasions during winters 2003/04, 2004/05, 2005/06, 2008/09, 2011/12 and three times during 2012/13. Sometimes they were unsuccessful in making a kill and would sit in a tree for a short while before making an equally swift departure, but on one occasion one was seen on top of a dead Goldfinch on the lawn, and once a partly plucked corpse of a Collared Dove was found. For around 30 minutes after a Sparrowhawk visit, the garden appeared to be devoid of bird life, though the birds may have been there, but hidden and silent.

Black-headed Gull *Chroicocephalus ridibundus* First visited the garden in 2007/08, the sixth winter of the study; thereafter visited in three of the five remaining winters, with a peak of 11 bird-days during deep snow when, on 21 December 2010, the number recorded touching down to snatch food from the bird table (four) was a minimum as there may have been more coming from the small but frenzied airborne mob of mixed gull species around the table. The long interval between the start of the study and the first arrival of Black-headed Gull implies a certain amount of caution, as once they had sampled it they visited in four out of the six remaining winters.

Mediterranean Gull *Larus melanocephalus* One bird touched down after one or two overflights and took a food item from the bird table on 21 December 2010.

Common Gull *Larus canus* Three bird-days, 21-22 December 2010; two on 22 December being an adult and an immature which it robbed of a food item.

Herring Gull *Larus argentatus* Nine bird-days, the first not until 20 December 2007. Thereafter, there were visits every winter, apart from 2009/10.

Feral Pigeon/Rock Dove *Columba livia* Present regularly throughout the study period. In later years, after awaiting arrival of fresh food, flocks feeding on the ground beneath hanging feeders could keep finches away by sheer force of numbers; they also fed readily on peanuts and pieces of bread. Two or three birds attempted to copy the finches by feeding from hanging peanut feeders, but had difficulty in doing so. Birds with apparently pure Rock Dove type plumage pattern accounted for around 40-50% of the flock present, the second most common plumage phase being the same but with the light grey of the back and wings largely obscured by a heavy pattern of dark spotting.

Woodpigeon *Columba palumbus* One pair was frequently present and feeding on the lawn; unlike the feral Rock Doves, however, they were not gregarious, and any third bird entering the garden was invariably chased away. The birds fed on a mixture of nuts, bread, seeds and anything else that fell from the hanging feeders above.

Collared Dove *Streptopelia decaocto* One pair, or sometimes a single bird, visited the garden occasionally early on in the study and much more frequently in the winters 2005/06, 2006/07 and 2007/08, after which numbers of visits dwindled rapidly, and ceased almost entirely after early 2009, when a Sparrowhawk left a half-plucked corpse of one in the garden.

Magpie *Pica pica* This is another species where a pair, or succession of pairs, defended the garden as their territory.

Table 3. Distinction between apparently gregarious and apparently territorial (or low population density) species based on relationship of mean maximum numbers present to percentage of watched days on which species was present.

Total days watched 457	A Mean maximum numbers present*	B No. of days present	Percentage of days present	Ax100/B Apparent gregarious species n = 7, 11	Ax100/B Apparent territorial species n = 8, 11
Species					
House Sparrow	11.73	453	99.1	11.83	~
Chaffinch	11.61	453	99.1	11.71	~
Greenfinch	8.12	431	94.3	8.61	~
Blue Tit	2.06	431	94.3	~	2.18
Blackbird	3.36	430	94.1	~	3.57
Starling	11.55	426	93.2	12.39	~
Feral Rock Dove	8.94	421	92.1	9.70	~
Magpie	2.42	394	86.2	~	2.81
Woodpigeon	2.42	349	76.4	~	3.17
Coal Tit	1.69	344	75.3	~	2.25
Dunnock	1.24	307	67.2	~	1.85
Robin	1.33	298	65.2	~	2.04
Goldfinch	7.48	290	63.5	11.80	~
Jackdaw	4.21	289	63.2	6.66	~
Great Tit	1.75	272	59.5	~	2.94
Siskin	2.18	178	38.9	5.60	~
Redpoll	2.76	160	35.0	7.88	~
Blackcap	1.09	152	33.3	~	3.28
Rook	1.36	104	22.8	5.99	~
Linnet	1.70	76	16.6	10.20	~
Collared Dove	0.75	76	16.6	~	4.51
Song Thrush	0.51	70	15.3	~	3.33
Long-tailed Tit	1.36	39	8.5	15.98	~
Redwing	0.58	22	4.8	11.96	~
Hooded Crow	0.39	21	4.6	8.57	~
Goldcrest	0.33	18	3.9	8.46	~
Brambling	0.67	16	3.5	19.04	~
Black-headed Gul	l 0.36	14	3.1	11.87	~
Wren	0.33	12	2.6	12.69	~
Sparrowhawk	0.21	9	2.0	10.77	~
Bullfinch	0.18	9	2.0	9.23	~
Fieldfare	0.24	8	1.8	13.85	~
Herring Gull	0.18	8	1.8	10.39	~
Common Gull	0.09	3	0.7	9.23	~
Carrion Crow	0.03	1	0.2	13.82	~
Mediterranean Gu	II 0.03	1	0.2	13.85	~

^{*} Mean maximum numbers refers to mean of all monthly maxima of numbers present, (n = 33, three winter months over eleven years)

Annual means of from 0.8 to 1.9 were compatible with presence of a resident pair but with fairly frequent challenges from outsiders. Nineteen months had peak numbers of two birds and three had peaks of one whilst there were six peaks of three birds, four of four, and one of five. Conflict could be severe as in one case a Magpie was seen lying on its back on the ground whilst two others attacked it, one pecking at its

head and the other at its vent whilst a fourth bird, assumed to be the victim's mate, stood by simply watching the proceedings; the event ended only with artificial intervention, on which all four birds flew away. Their dealing with food also had certain unusual features. Putting peanuts on the bird table was discontinued after a Magpie was observed to cache peanuts by burying them in the lawn. A piece of interesting

Table 4. Means and extremes of values of 100A/B (see Table 3) for all species present on over 50% and over 10% of days watched, showing difference between apparently gregarious and apparently territorial species.

Percentage of da	>50%	>10%	
Gregarious	upper extreme	11.83	11.83
species	mean	10.39	9.86
	lower extreme	6.66	5.60
		(n = 7)	(n = 11)
Separation betw	een inner extremes	3.09	1.09
Territorial	upper extreme	3.57	4.51
species	mean	2.86	2.90
	lower extreme	1.85	1.85
		(n = 8)	(n = 11)

food-related behaviour comprised the bird approaching with extreme caution a piece of bread pinned to the lawn with a wire hoop, clamping its beak round a corner of the piece and suddenly leaping backwards with powerful wing beats, indicating that seeing the wire led the bird, perhaps from past experience, to (incorrectly) believe that it was part of a trap.

Jackdaw Corvus monedula Although with a similar number of occurrences to the Magpie, the Jackdaw's pattern of usage of the garden was rather different, being gregarious rather than territorial. Whilst overall mean numbers per day were similar, days present in the garden were fewer whilst peak numbers were higher. The Jackdaw's menu was fairly omnivorous, most often feeding on the bird table and the ground, but frequently clinging onto a hanging large 'fat-ball'. Also like the Magpie, there were indications of ingenuity, when a large (about 10 cm) 'fat-ball' was suspended from the branch of a tree by about 30-40 cm of string, this 'fat-ball' was found on several occasions to have been hauled up and secured close to the branch by the string being looped round two small stumps of twig protruding from the branch roughly 10 cm apart, thus bringing it within easy reach of the bird on the branch. Though the operation was never observed in process, Jackdaws seem much the most likely species responsible since they frequently fed on the 'fat-balls', which Magpies rarely did, and Grey Squirrels very rarely, if ever.'

Rook *Corvus frugilegus* The Rook was decidedly slower than the Jackdaw in accepting provided food, with only two sightings prior to 2005/06 and never having the same level of presence in the garden; maximum percentage days present being in December 2007 and December 2010. Maximum peak numbers were four, in December 2007, December 2008 and

January 2009. The Rook mostly fed on the bird table on bread and kitchen scraps.

Carrion Crow *Corvus corone* One was seen on 5 December 2004, feeding on the bird table. The bird had slight traces of grey plumage low down on its belly, suggesting some Hooded Crow ancestry, but this very small area lacked the speckled black and grey pattern of hybrids of which the author has some experience. It was subsequently seen a number of times on a nearby roof, apparently paired with a Hooded Crow.

Hooded Crow *Corvus cornix* One on 11 January 2006 and again (or another) on 17 January was the first record for the study area, after which it became a rather rare visitor to the garden with single birds on one or two months only with the exception of 2011/12, when the species occurred during all three months and two birds did so on 6, 14 and 15 December 2011. The main food taken was bread and kitchen scraps on the bird table. The three larger corvid species, like the gulls, appeared to favour the bird table as it provided a better view of the surroundings than the ground did.

Goldcrest *Regulus regulus* An occasional visitor, single birds appearing mostly on single days (two birds once in December 2005), apart from 2004/05, 2007/08, 2010/11 and 2011/12 when none were recorded. The weather in the last mentioned two winters possibly proved lethal for this small species. It ignored all provided food, seeking tiny prey items in the bark of fruit trees.

Blue Tit *Cyanistes caeruleus* The most frequently seen tit, present on every day of watching during eighteen months out of the period total of thirty-three. Peak numbers of two during 30 of the 33 months of the project, indicating a probable succession of pairs in the territory. Given the short lifespans of small passerines, a succession of pairs is pretty well inevitable, and the flat peak value of two makes one doubt short term visits by roving birds. The faithful attendance by up to two birds is in contrast to high densities observed by the author at a feeding station in southern England, also noted by Perrins (1979) and illustrated by Moss and Cottridge (2000), and is strongly in keeping with the much lower winter densities of the species in Ireland as shown by Lack (1986).

Great Tit *Parus major* A similar situation to that of the Blue Tit, though mean numbers per day were lower with peak numbers of one in eight months and two in 25 months. As with the Blue Tit, numbers here, suggesting territoriality, were in line with population densities substantially lower than those in southern England shown by Lack (1986). The Great Tit differed here from other tits in that the first sighting of the day tended to be later, often well after 11:00 hours, after watching from around 09:30 hours.

Coal Tit Periparus ater Probably a succession of single pairs present in their territory throughout the survey period, four present twice, in February 2009 and December 2012. The method of feeding differed from that usually seen in most species using the hanging feeders in that the bird arrived at the seed feeder, usually containing sunflower seed, and immediately selected a seed, most obviously when it was a white kernel and immediately flew off into seclusion to consume it at leisure, always a prudent procedure with the possibility of a Sparrowhawk visit.

Long-tailed Tit *Aegithalos caudatus* An irregular visitor during brief visits in small numbers in all winters except 2009/10 and 2010/11; like the Goldcrest possibly suffered casualties due to the extreme cold in the two winters. Numbers in any recorded occurrence were lower than expected; 40 occurrences yielded a mean of 1.9 individuals, with the largest being of eight birds. They fed mostly on 'fatballs'.

Blackcap *Sylvia atricapilla* After two in January 2003, only one bird was present on some days every season in January and/or February only prior to 2008/09. Peak numbers slightly increased then from one to three in all three months each winter, probably partly due to increased use of apple provided. The Blackcap here was an apple specialist which defended its food quite aggressively against other species.

Wren *Troglodytes troglodytes* Visits by single Wrens took place occasionally in 2003/04 to 2006/07, 2010/11 and 2011/12, during which they mainly hunted for invertebrates in the bark of the fruit trees, this being one of the few species that ignored the food provided.

Starling *Sturmus vulgaris* A flock of 33 on 29 January 2008 was the largest assembly of any single species recorded in the garden during the survey. Although like most species, numbers and frequency of presence started low, they built up, and from 2007/08 on, Starlings were present on every day watched. Over the whole period, the mean number of birds present per day was 4.8 with the highest yearly value at 8.4 in 2007/08, and the lowest (apart from 1.8 in 2002/03) at 2.4 (2012/13), though peak numbers for single days were often much higher. In terms of sightings, this was the fourth most numerous species. The majority usually fed on the lawn, numbers sometimes being too high for the available space at the bird table or hanging feeders, but these were also very frequently used.

Blackbird *Turdus merula* Generally present in pairs, but with occasional numbers, briefly, of up to six with increased excitement but no signs of serious territorial conflict. A ground

feeder here, food included bread and scraps of fat from 'fat-balls' but apple was its speciality, leading to competition with Fieldfare, Redwing and Blackcap.

Fieldfare *Turdus pilaris* Seventeen bird-days; present in 2004/05, 2005/06, 2009/10 and 2010/11 only, the last two being winters of exceptional severity. In no year did the number present exceed five, and they mainly fed on apple on the ground.

Song Thrush *Turdus philomelos* One bird, or a succession of birds, was frequently present during the winters 2002/03 to 2004/05 and from 2007/08 to 2010/11; infrequent higher numbers peaked at three in December 2009. The main feeding activity involved hunting among dead leaves, the actual food not being identifiable, with little or no interest in provided food.

Redwing *Turdus iliacus* Present on 26 bird-days in six winters, peak numbers being five in January 2003, and two, three and one in December, January and February respectively in the harsh winter of 2009/10. Two were also present in the harsh winter of 2010/11; mainly a fruit eater.

Robin *Erithacus rubecula* Single Robins were present quite frequently in December and usually January, with pairs recorded occasionally, usually in February. Feeding on the ground and occasionally the bird table, they took scraps of fat and other edible debris of a wide spectrum of foods. They appeared to avoid, if not actually being intimidated by, flocks of feeding finches and sparrows.

Dunnock *Prunella modularis* Single birds were frequent visitors over most of the study period, feeding on the ground and depending to a very limited extent, if at all, on provided food. It frequently scuffled amongst dead leaves under the trees and bushes like the Song Thrush.

House Sparrow *Passer domesticus* This species was the second most abundant in terms of the number of sightings of individuals during the study, and peak numbers on any day were 20, the third highest score of any species. Its diet showed a broad spectrum with perhaps a special preference for bread. Frequently heard in bushes on the south side of the garden, its preference for feeding close to cover was, if anything, more marked than was the case for most species.

Chaffinch *Fringilla coelebs* This species was the most abundant during this study with numbers on a single day peaking at 20. Unlike the House Sparrow and most finches, it was a ground feeder, rarely trying to hang onto a hanging feeder; it was prominent amongst finches feeding on the

patch of spilt seed which accumulated under nyjer seed feeders when in use, often along with Goldfinches unable to get a place on the actual feeder and, during their rare visits, its close congener the Brambling.

Brambling *Fringilla montifringilla* During the winters of 2005/06, 2007/08 and 2012/13, the Brambling appeared singly among the feeding Chaffinches, usually taking nyjer seed spilt from feeders above. Most of the records involved one day only, the largest numbers occurring in 2010/11, the second of the exceptionally cold, snowy winters, when birds were present on 2 December, 27 January (two), 2, 22, 23 and 24 February.

Greenfinch *Chloris chloris* Another of the gregarious finches with a strong preference for sunflower seed, availability of which led to complete ignoring of peanuts, which otherwise would be consumed readily. During the study period an occasional bird was noticed with fluffed-up plumage and food remains round its beak, suggesting trichomoniasis infection, but the low mean bird per day levels of 2009/10 and 2010/11 may possibly have simply been due to the two unusually harsh and snowy winters.

Goldfinch *Carduelis carduelis* The status of the Goldfinch changed markedly from 2008/09 onwards, almost certainly the result of introducing nyjer seeds to the menu. With the increase in Goldfinch numbers competition for the eight feeding ports on the two hanging feeders in use was strong, and was at times intense. There was also a strong impression that when Goldfinches started patronising the facilities three other finch species followed; Siskin, Lesser Redpoll and Linnet.

Siskin *Carduelis spinus* Siskins were notable for their late arrival, being only present in December in two winters (2005/06 and 2008/09). The poorest winter was 2009/10, with only two birds recorded (February) possibly indicating vulnerability to the extreme coldness of that winter on the part of this small species, and the best was 2012/13, with a mean of three birds per day overall, and the maximum numbers in a day of 12 on 9 February 2013.

Linnet Carduelis cannabina The Linnet was a newcomer, totally absent until the arrival of one on 14 December 2010 and two the next day, eventually giving 25 sightings in 2010/11, followed by up to three giving 29 sightings in 2011/12 and up

to six giving 40 sightings in 2012/13. Their feeding behaviour was very much on the *Carduelis* pattern, associating with other finches of the same genus, but with much competition and friction between them.

Lesser Redpoll *Carduelis cabaret* A rather scarce visitor in fluctuating numbers although mean numbers per day, and number of days present showed an increase over the winters with those prior to 2009/10 being the poorest and 2011/12 being the best. Up to 2010/11 there was a strong tendency to be scarcest in December, though this was reversed in the remaining two winters.

Bullfinch *Pyrrhula pyrrhula* Only visited the garden in six winters and, with the exception of a pair in February 2003, all visits involved single birds; in 2004/05 (2), 2006/07 (2), 2009/10 (1), 2010/11 (6, in the snowy December) and 2012/13 (1). Birds were never observed to take provided food but usually simply inspected the area, probably drawn by the density of bird life there, and left quite quickly.

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Tidal variation in the use of Dublin Bay by wintering waterbirds

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During winter, waterbirds use coastal sites very differently across the tidal cycle. Bird numbers and distribution are likely to vary widely, and to be species- and site specific with respect to the stage of the tide. The aim of this study was to compare high- and low tide waterbird abundance and distribution at Dublin Bay, one of Ireland's major wintering waterbird sites. Comparable data from high- and low tide surveys and from consistent count areas (subsites) were examined for three seasons (2011/12, 2013/14 and 2014/15); data originating from I-WeBS (high tide), the National Parks and Wildlife Service Waterbird Survey Programme (low tide) and the Dublin Bay Birds Project (Dublin Port Company) (high- and low tide). Waterbird abundance varied greatly between the two tidal states. While a bias towards higher numbers at low tide was found for over half of the waterbird Special Conservation Interest species, the frequency with which a monthly peak count could be recorded at low tide or on a rising/high tide count was similar for a number of species. The distribution of waterbirds across Dublin Bay was consistent for certain species, and particularly for waterfowl such as Shelduck Tadorna tadorna, Teal Anas crecca, Pintail Anas acuta and Shoveler Anas clypeata. Many waders also appeared to be broadly consistent in their use of different parts of the site as the same subsites were ranked highly at both hiah- and low tide. However, subsites were used by a lower proportion of the birds during low tide, highlighting the more widespread distribution of wader species during this tidal stage. Consistency in the use of subsites at low- and high tide implies a degree of subsite fidelity and in some cases suggests that some of the birds may have been preferentially foraging close to their roost sites. However, care is needed in the interpretation of results for sites like Dublin Bay that are subject to considerable amounts of human activity. The patterns in abundance and distribution serve to highlight that adequate monitoring of coastal wetland sites requires a combination of both high- and low tide counts.

Introduction

The importance of coastal wetland sites for over-wintering waterbirds is well understood and documented (e.g. BirdLife International 2001, Boere *et al.* 2007). Globally, wetland ecosystems are under pressure from rapidly increasing urban populations in coastal areas (Ehrenfeld 2000). Ireland is no exception and there has been a substantial increase in

development pressure here since the 1970s, especially pertinent given that some of the key wetland sites are located close to large cities (McNaghten & Crowe 2010). Coupled to increasing human populations and increasing development is the potential for habitat modification and a rise in disturbance

Plate 180. Black-headed Gull (M.O'Clery).

Irish Birds 10: 373–382 (2016) 373

levels caused by a range of human activities including recreational disturbance. Such factors have the potential to become more significant if related to climate change involving sea level rises and storm surges, which may modify the abundance and quality of wetlands used by waterbirds (Crowe et al. 2013). Therefore, it is important that management measures at key wetland sites ensure that sufficient feeding and roosting habitats are available for the long-term in order to sustain important concentrations of waterbirds. However, appropriate management can only be implemented given adequate knowledge of how waterbirds use wetland sites, both in time and space.

Waterbirds use sites very differently across the tidal cycle (Dias et al. 2006b, Granadeiro et al. 2006). As the tide recedes, many wading bird species follow the tidal edge when foraging. As the tide recedes further these birds may then fly to other areas across tidal flats. Similarly, birds may follow the tidal edge on a rising tide; some close to areas where they will roost at high tide, while others stop feeding at a certain point to fly to their high tide roosts in other parts of the site, or beyond. Such behaviours are not only site- and species specific (Scheiffarth et al. 1996), but can vary both within and between winter seasons depending on factors such as weather (e.g. direction of prevailing wind), variability in prey availability and prev abundance, and variations in site-based activities or human disturbance. Therefore, to be fully informed about how waterbirds make use of sites necessitates information on waterbird abundance, distribution and behaviour throughout the tidal cycle, or at a minimum during the periods that lead up to and follow the key stages of high- and low tide.

The aim of this study was to compare high- and low tide waterbird abundance and distribution in Dublin Bay. Located on the east coast of Ireland, Dublin Bay is an internationally important site for wintering waterbirds and encompasses two Special Protection Areas (SPA) under Directive 2009/147/EC on the conservation of wild birds (the codified version of Council Directive 79/409/EEC, as amended) (the Birds Directive), namely North Bull Island (SPA 4006) and South Dublin Bay and River Tolka Estuary (SPA 4024). These sites collectively support internationally important numbers of three wintering waterbird species: Light-bellied Brent Goose *Branta bernicla brota* (hereafter referred to as Brent Goose), Black-tailed Godwit *Limosa limosa* and Bar-tailed Godwit *Limosa lapponica* and a further 15 species in numbers of all-Ireland importance (NPWS 2014).

Wintering waterbirds have been well-monitored at Dublin Bay since 1994/95 through the Irish Wetland Bird Survey (I-WeBS), with counts undertaken on a rising- to high tide. During the winter of 2011/12, the site was surveyed as part of the 2009-2012 National Parks and Wildlife Service (NPWS) Waterbird Survey Programme, and in 2013, a three-year monitoring project was launched (Dublin Bay Birds Project;

dublinbaybirds.blogspot.ie) that includes both high- and low tide counts in order to identify key feeding and roosting areas. Therefore, the data collected allowed us to investigate two main objectives, as follows:

- Are waterbird numbers different between high- and low tide?
- Are waterbirds distributed differently across Dublin Bay at high- and low tide?

When wetland sites are located close to each other it is reasonable to expect that there may be some interchange in waterbirds between them. Waterbird species also differ in their degree of site fidelity during winter with some species, for example Knot Calidris canutus (e.g. Symonds & Langslow 1984) potentially utilizing a suite of sites. Dublin Bay sits at the southern end of a series of four closely located and important coastal wetland sites for waterbirds, namely (north to south): Rogerstown Estuary (SPA 4015), Malahide Estuary (SPA 4025), Baldovle Bay (SPA 4016) and Dublin Bay (SPA 4006 & 4024). Therefore, one final consideration was whether Dublin Bay may be a closed system with little movement of birds in or out during the season. While confirmation of such behaviour requires marking techniques and recording using methods such as colour-ringing, analysis of high- and low tide data can provide a context for such movements.

Methods

Data source: (I-WeBS)

I-WeBS count methods follow the well-established technique of counting the numbers of waterbirds at wetland sites by the 'look-see' method (Bibby *et al.* 1992). This involves counters recording the number of individuals of each waterbird species on frequent visits to their pre-defined sites. Counts are undertaken once per month between September and March inclusive, and carried out on a rising tide, or close to high tide (I-WeBS 2008, Boland & Crowe 2012). Large sites, such as Dublin Bay, require a team of counters to ensure that counts are conducted over a relatively short period (within three hours), thus minimising double-counting of birds, particularly for those species that move extensively. Hence, the site is subdivided into manageable subsites (Figure 1).

Data source: (2009-2012 NPWS Waterbird Survey Programme)

Designed to collect waterbird data during the low tide period, this survey programme was carried out in much the same way as I-WeBS, the main difference being the survey timing (undertaken during the two-hour period either side of low

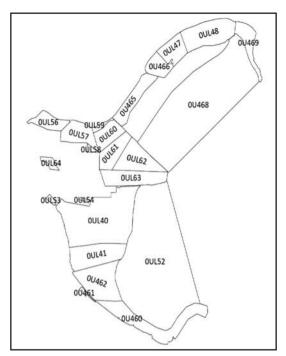


Figure 1. Count subsites at Dublin Bay (see Appendix 1 for subsite names).



Plate 181. Redshank (M.O'Clery).

tide). In addition, data were collected on habitat use (intertidal/subtidal/supratidal) and behaviour (foraging or roosting/other). Dublin Bay was included in this survey programme during the 2011/12 season and four monthly low tide counts were undertaken (October, November and December 2011 and February 2012). Count subsites were based largely on I-WeBS subsites. Full methods for this programme can be found in Lewis and Tierney (2014).

Data source: (Dublin Bay Birds Project)

This project aimed to count birds on a monthly basis throughout the year. Counts were undertaken between July 2013 and July 2015. High tide count methodology followed I-WeBS (I-WeBS 2008) while low tide counts followed methods used for the NPWS Waterbird Survey Programme (Lewis & Tierney 2014).

Data analyses

Counts from low- and high tide surveys were examined for three seasons: 2011/12, 2013/14 and 2014/15. The count data for 2011/12 originated from I-WeBS (high tide) and the NPWS Waterbird Survey Programme (low tide), while both high- and low tide data from 2013/14 and 2014/15 originated from the

Dublin Bay Birds Project. Given the different origins of data, and the necessity to examine comparable monthly data, the dataset analysed contained a few data gaps which are highlighted as necessary. As previously mentioned, high tide counts are undertaken on a rising tide through to high tide, but for clarity, hereafter these data are referred to as high tide counts.

High- and low tide data were compared for total waterbirds (all species combined) and three waterbird groups, namely 'waterfowl and allies', 'waders' and 'gulls'. In addition, the difference in the abundance and distribution of the Special Conservation Interest species (SCI's) listed for the respective SPA sites of Dublin Bay was examined. Firstly, the differences between numbers at low- and high tide across eight comparable months were averaged to show the bias towards higher numbers at one or other of the two tidal stages (calculated for the months October, November, December and February of the 2013/14 season, and November, December, January and February of the 2014/15 season). The frequency at which a monthly peak count was recorded at either low tide or at high tide was also calculated. The distribution of SCI species at high- and low tide was assessed by calculating the average proportional subsite use during the months November, December and February of the 2013/14 and 2014/15 seasons.

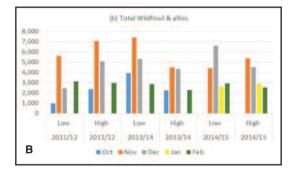
Results

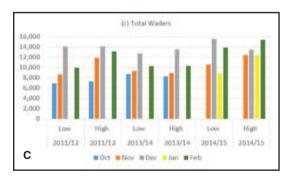
Tidal variation in numbers

During the 2011/12 season monthly site totals (all waterbirds) were relatively similar across the months. Numbers were higher during low tide in October and December but the difference was relatively small. During November and February, numbers were higher during high tide with November recording the largest difference (13%) (Figure 2a). Monthly site totals for 2013/14 were higher at low tide in all months, the largest difference being in October. Numbers were also higher during low tide in November, December and January of the 2014/15 season, while numbers in February were 12 % higher at high tide (Figure 2a). Monthly site total counts for the groups 'wildfowl and allies' and 'waders' were almost exclusively larger during high tide across 2011/12 (Figures 2b & 2c, respectively). In contrast, the total number of gulls was higher every month during the low tide period (Figure 2d). During 2013/14 'wildfowl and allies' were more numerous during low tide counts (Figure 2b), as were gulls (Figure 2d), but wader counts showed little pattern between the two tidal states (Figure 2c). No patterns are evident for 2014/15 with the exception of substantially higher numbers of gulls at low tide during some months. Waders were the largest group, and made up a higher proportion of the total number of waterbirds during high tide stages in all seasons (average 68%, n = 12). On average, gulls made up 25% of the total numbers at low tide (n = 12) but were proportionally the smallest group at high tide (average <12%).

Monthly counts showed great variation between the two tidal states for most waterbird SCI species at Dublin Bay. Averaging across comparable months revealed that numbers were higher at low tide for 11 out of 18 SCI species (Figure 3), yet the frequency at which low tide counts recorded the peak monthly count (compared to high tide) was relatively similar for most species with the exception of Golden Plover *Phuvialis apricaria*, Teal *Anas crecca* and Black-headed Gull *Chroicocephalus ridibundus*. Among the waders, numbers of Oystercatcher *Haematopus ostralegus* and Black-tailed Godwit were higher at high tide in most months. While peak numbers of Ringed Plover *Charadrius hiaticula* were recorded equally on a high- or low tide count, higher numbers of birds were recorded, on average, at high tide.







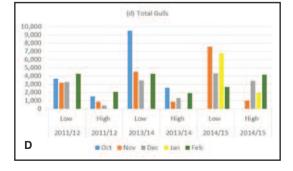


Figure 2. Monthly waterbird totals at high tide and low tide recorded at Dublin Bay during the 2011/12, 2013/14 and 2014/15 seasons for (a) 'total waterbirds', (b) 'total wildfowl and allies', (c) 'total waders' and (d) 'total gulls'. Note that October 2014 is not shown as there was no high tide count that month, while comparable high-and low tide data are only available for January 2014/15.

Table 1. Species distribution at Dublin Bay. The top five subsites are based on average proportional subsite use during the months November, December and February of 2013/14 and 2014/15. The average proportional use is shown in brackets. (Note that proportional use was calculated across all subsites, therefore proportions for the top five subsites in this table do not necessarily add up to 100). Colours are used to highlight the subsites important at both low- and high tide for each species, while a bold font indicates a subsite that supported numbers of all-Ireland importance on any one survey occasion. Note that Golden Plover is not included. See Figure 1 for subsite locations and Appendix 1 for subsite names. * Under Shelduck, subsite OUL40 includes subsite OUL41.

Special Conservation										
Interest species	1	2	High tide 3	4	5	1	2	Low tide	4	5
Brent Goose	0U465 (37)	0UL47 (16)	0UL48 (16)	0UL56 (9)	0UL54 (7)	0U465 (27)	0UL47 (20)	0UL48 (13)	0U469 (9)	0UL56 (8)
Shelduck*	0UL47 (50)	0U465 (25)	0U466 (17)	0UL48 (7)	0UL40 (0.3)	0U466 (35)	0UL47 (30)	0U465 (27)	0UL48 (6)	0UL57 (2)
Teal	0UL47 (39)	0U465 (29)	0U461 (15)	0U466 (10)	0UL48 (7)	0U466 (37)	0UL47 (29)	0U465 (22)	0U461 (6)	0UL48 (5)
Pintail	0U466 (70)	0UL47 (26)	0U465 (4)	-	-	0U466 (75)	0UL47 (25)	-	-	-
Shoveler	0U465 (79)	0UL47 (15)	0U466 (6)	-	-	0U465 (61)	0UL47 (29)	0U466 (10)	0UL40 (0.5)	0U460 (0.2)
Oystercatcher	0U465 (32)	0U462 (20)	0UL48 (17)	0UL41 (14)	0UL40 (9)	0UL40 (28)	0U469 (11)	0UL41 (10)	0U465 (9)	0UL48 (8)
Ringed Plover	0UL40 (42)	0U462 (34)	0UL41 (23)	0U460 (0.5)	0U465 (0.1)	0UL40 (52)	0UL48 (24)	0U462 (17)	0UL41 (7)	-
Grey Plover	0UL48 (33)	0UL47 (26)	0U465 (25)	0UL41 (10)	0U466 (6)	0UL48 (25)	0UL60 (18)	0UL47 (12)	0U468 (11)	0U465 (10)
Knot	0U465 (57)	0U462 (18)	0UL48 (16)	0UL41 (5)	0UL40 (3)	0U460 (54)	0UL60 (23)	0U462 (10)	0UL48 (5)	0U465 (4)
Sanderling	0U468 (49)	0U462 (26)	0UL40 (17)	0UL41 (5)	0UL52 (2)	0U468 (56)	0UL40 (14)	0U462 (12)	0UL62 (7)	0UL41 (5)
Dunlin	0UL47 (20)	0U465 (19)	0UL48 (16)	0UL41 (11)	0UL40 (10)	0UL48 (29)	0UL40 (18)	0UL56 (13)	0UL60 (9)	0UL61 (7)
Black-tailed Godwit	0U465 (36)	0U466 (32)	0U461 (13)	0UL48 (11)	0U462 (3)	0U460 (22)	0U465 (18)	0UL56 (17)	0U466 (15)	0UL48 (9)
Bar-tailed Godwit	0U465 (56)	0U462 (28)	0UL48 (8)	0UL41 (6)	0UL40 (1)	0U460 (44)	0U468 (10)	0UL61 (9)	0UL60 (9)	0UL62 (6)
Curlew	0U465 (39)	0UL48 (34)	0UL47 (10)	0U466 (9)	0U462 (4)	0U466 (30)	0UL48 (14)	0UL60 (12)	0UL56 (10)	0U465 (9)
Redshank	0U465 (37)	0U461 (16)	0UL47 (15)	0UL40 (8)	0UL41 (7)	0U465 (20)	0UL48 (16)	0UL56 (11)	0U466 (10)	0UL47 (9)
Turnstone	0U465 (43)	0U460 (16)	0U469 (8)	0UL41 (7)	0UL47 (6)	0U460 (19)	0UL59 (17)	0UL57 (14)	OUL62 (9)	0U469 (8)
Black-headed Gull	0U465 (22)	0UL40 (17)	0U466 (14)	0U462 (12)	0UL56 (11)	0UL56 (19)	0UL40 (15)	0U460 (11)	0U466 (10)	0UL60 (8)

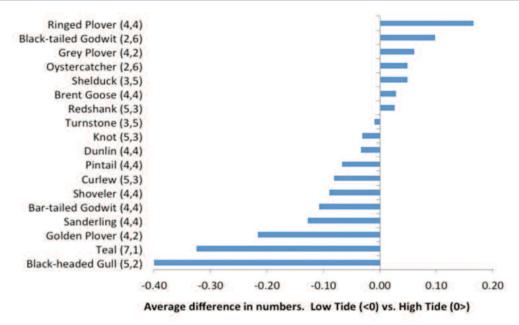


Figure 3. The difference between numbers of waterbird SCI species recorded at Dublin Bay in comparable monthly counts averaged to show the bias towards higher numbers at either low tide or high tide. Numbers in brackets refer to the frequency of peak counts recorded during either a low- or a high tide count.

Tidal variation in distribution

Despite the variation in numbers noted above, the distribution of wildfowl in Dublin Bay between tidal states was broadly stable. Shelduck *Tadorna tadorna*, Teal, Pintail *Anas acuta* and Shoveler *Anas clypeata* were distributed across a relatively similar subset of subsites during both the low- and high tide stages (Table 1); these subsites located on the inner (landward) side of North Bull Island. Pintail and Shoveler were particularly consistent in their use of just two subsites during both tidal states. Brent Goose readily move to terrestrial grasslands to forage, yet the highest average numbers across the months analysed were consistently recorded at the same subsites; the top three ranking subsites important at both lowand high tide, although numbers were higher at high tide.

Such consistency in subsite use was not as apparent for wader species, despite average proportions being highest during both tidal stages within comparable subsites for Ringed Plover, Grey Plover *Pluvialis squatarola*, Sanderling *Calidris alba* and Redshank *Tringa totanus* (Table 1). For example, while over 50% of Grey Plover were concentrated in just two subsites during the high tide stage, and these same subsites were important during low tide, they held fewer birds at low tide, highlighting the much more widespread distribution of the species at low tide (15 subsites) compared to high tide (6 subsites). One subsite (0U465 Wooden Bridge — Causeway)

was important for Redshank at both low- and high tide, and both tidal states supported numbers of all-Ireland importance; thereafter however, there was little consistency in distribution of this wader species between the two tidal states.

Four of the top five subsites used by Oystercatcher were the same at both tidal stages, but the numbers held varied with nearly three-quarters of the site total numbers held by the four subsites during high tide, but around half of birds during low tide. Three subsites were particularly important for Knot during high tide, holding 91% of the site total. While the same three subsites were ranked in the top five for Knot during low tide, the proportional importance was substantially lower (<20%). Ringed Plover had a relatively restricted distribution at both high- and low tide with most birds concentrated in just three subsites (Booterstown – Merrion Gates, North Sandymount Strand and South Sandymount Strand). All three subsites were important during both highand low tide stages, although again the proportional importance was much greater at high tide. Bar-tailed Godwit exhibited a distribution that differed distinctly between highand low tide in that none of the subsites ranked in the top five during high tide were ranked highly during low tide. 0U465 (Wooden Bridge – Causeway) is clearly favoured at high tide for roosting while a different suite of subsites come into use for low tide foraging.

Discussion

Tidal variation in numbers and distribution

Intertidal habitats provide an ever-changing, yet predictable, environment for waterbirds; expanding to provide exposed tidal flats during the ebb- and low tide periods, while contracting during the flood- and high tide periods. The tidal cycle is therefore a major factor influencing the waterbird species present, and their numbers and distribution across an intertidal site at any one point in time (Burger *et al.* 1977, Tiedemann & Nehls 1997, Burton *et al.* 2004, Dias *et al.* 2006b).

Assessing monthly and seasonal differences for Dublin Bay showed great variation between tidal states for both total waterbirds and the species groupings, with no consistent patterns or preferences for one state of the tide over another, apart from higher numbers of gulls during the low tide period. The domination of the gull group by the Black-headed Gull is consistent with previous studies at the site (e.g. Merne et al. 2009) which have recorded very high numbers at dusk when the gulls arrive into Dublin Bay to roost for the night. However, numbers of Black-headed Gulls at low tide reported in the current study far exceed the average daytime number (707 individuals) reported by Merne et al. (2009). When assessing individual waterbird species, while we found a bias towards higher numbers at low tide for over half of the waterbird SCI species, the frequency at which a monthly peak count was recorded on a high- or a low tide count was remarkably similar for a number of species, thus highlighting the importance of gathering both sets of data to adequately monitor the species. The bias towards higher numbers at high tide is perhaps surprising for species such as Ringed Plover, Black-tailed Godwit, Grey Plover, Oystercatcher and Redshank, as these waders all rely on exposed intertidal flats to forage. However, previous studies have shown that low tide counts can underestimate the numbers of some waders (Dias et al. 2006b) and wildfowl (Burton et al. 2004), especially those that forage by following the tideline.

Despite variation in waterbird abundance between highand low tide, distribution between the two tidal states was remarkably consistent for certain species, and particularly for waterfowl. Shelduck, Teal, Pintail and Shoveler showed a high degree of preference for areas on the inner (landward) side of North Bull Island for foraging at low tide and roosting in saltmarsh habitat at high tide. Based on the top five ranked subsites utilised during the two tidal states, many waders appeared to be broadly consistent in their use of different parts of the site. However, on closer examination the distributional patterns were more complex. In many cases, while a similar suite of subsites were ranked as important for both high- and low tide counts, proportional abundance differed



Plate 182. Turnstones (M.O'Clery).

greatly, more birds recorded in the comparative subsite during the high tide period. This highlights the more widespread distribution of wader species during the low tide period and was particularly evident for Oystercatcher, Grey Plover, Knot, Black-tailed Godwit and Curlew *Numenius arquata*.

The fact that proportional abundance was greatest for the same subsite at both tidal stages for the wader species (Redshank and Grey Plover) suggests that some of the birds may have been foraging preferentially close to their roost sites. This has been shown in previous studies of Oystercatcher (Swennen 1984) and Dunlin Calidris alpina (Have et al. 1984, Dias et al. 2006a) where higher status birds tended to roost closer to the best feeding areas. This strategy minimises the distance between roosting and feeding areas and reduces the energy costs of flying between sites (Rogers 2003). Alternatively, our results may simply reflect preferential foraging in the same location at low tide and on a rising tide, with the birds then moving to roost elsewhere as the flooding tide pushes them up the shore. However, care must be taken in interpretation of these data for a site such as Dublin Bay that is subject to considerable amounts of human activity. For species that exhibit a high degree of subsite faithfulness we must be careful not to assume categorically that this indicates sufficient resources (Conklin et al. 2008). Another view may be that resources are actually limited, that is to say the birds have a lack of alternative places to go to because of higher



Plate 183. Ringed Plover (M.O'Clery).

levels of human disturbance in other areas. Coupled to this is the fact that birds that exhibit higher subsite faithfulness may be those that are more habituated to levels of disturbance; those species with a more widespread distribution being those that move in response to disturbance to a greater degree.

Bar-tailed Godwit exhibited a distribution that differed markedly between high- and low tide. The favoured low tide subsite used by Bar-tailed Godwit was Dun Laoghaire — Seapoint (0U460) which held on occasion up to 92% of the total site numbers, but only one individual was recorded there during high tide counts over the same time period. Some well-known distributional patterns were also evident from the data. For example, Bar-tailed Godwits are known to move from foraging areas in South Dublin Bay to areas around North Bull Island for roosting (Olivia Crowe, personal observation). This is indeed evident from the dataset, while similar movements by Knot were also evident.

Possible movements between other wetland sites

Dublin Bay is located in close proximity to several other internationally important wetland sites, with Baldoyle Bay located immediately to the north of Dublin Bay, and Broadmeadow (Malahide) and Rogerstown estuaries within

13 km distance. It is reasonable to expect that there is probably some interchange in birds between these sites. For example, some species may find foraging opportunities at low tide at one site, yet roost at high tide at another site, or vice versa.

The relatively stable distribution of Shelduck, Teal, Pintail and Shoveler across Dublin Bay suggests high site and subsite fidelity, yet differences between high- and low tide monthly counts were at times very large. This was particularly the case for Teal, and although considered to be moderately site faithful (Guillemain et al. 2009), numbers at times were more than double at low tide compared to high tide. Similarly, some wader species also utilised a similar suite of subsites at both high- and low tide, yet there was a high degree of variation in numbers. In addition to the caution urged regarding data interpretation in the preceding section, these results could also suggest movements of waterbirds, perhaps albeit temporary, out of Dublin Bay, and possibly as a result of human activities causing disturbance. The ability of waterbirds to disperse to and sample new areas could be of critical importance to a species, especially when faced with environmental change (Lourenco et al. 2016).

Assessing the potential movements of birds between sites requires colour-ringing or tracking techniques (Lourenco *et al.* 2016). However, intensive effort is required to obtain

repeated observations of marked individuals, while radiotelemetry is limited to manual detection via receivers and hence the outputs are available at a relatively local (Dublin Bay) scale (Tierney et al. 2017). However, these techniques would be extremely beneficial for species such as Ringed Plover and Sanderling, and to build on data already collected through the Dublin Bay Birds Project. Sanderling have been described as highly site faithful (e.g. Reneerkens et al. 2009, Lourenco et al. 2016), yet their numbers varied considerably between the two tidal states at Dublin Bay. Furthermore, observations at other sites around the country reveal marked differences in numbers between high- and low tide states, suggesting that birds may move to avail of alternative feeding or roosting opportunities (Lesley Lewis, personal observation), despite the fact that they appear relatively site faithful at the within-site level.

Implications of the results for site monitoring and protection

The Irish Wetland Bird Survey (I-WeBS), initiated in the winter of 1994/95, has been used as the primary method of monitoring the numbers and distribution of non-breeding waterbird populations during winter. These data, collected on a rising- to high tide when most birds are at roost, have been used to provide the basis for site selection and designation of Special Protection Areas, and have enabled the estimation of population size and trends of many waterbird species (Crowe & Holt 2013).

However, it is well recognised that birds may behave differently at low tide (indicated above). Most waterbirds avail of the opportunity to feed on intertidal flats when exposed, and during periods when their preferred prev is most active. Therefore, it is important to recognise the limitations of the I-WeBS dataset alone. This is especially the case when trying to decide on the relative importance of a particular area within a site. Unless there is a complete dataset, illustrating both high- and low tide distributions, then it is not possible to comment on the usage of a particular area. In Ireland, where most sites are counted for I-WeBS during the rising- to high tide period, there exists very little information on distribution and abundance during other tidal states. One exception is the NPWS Waterbird Survey Programme (2009-2012) that surveyed coastal SPA sites during the low tide period for one winter season. The survey data collected revealed many interesting and important patterns in abundance and distribution at these sites (e.g. Lewis & Boland 2011), and in addition to the current study, serves to highlight that adequate monitoring of coastal wetland sites requires a combination of high- and low tide counts.

Acknowledgements

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Appendix 1. Name and number of subsites at Dublin Bay (see Figure 1 for subsite locations).

0U460	Dun Laoghaire - Seapoint	OUL53	Sean Moore Park
0U461	Booterstown	OUL54	Ringsend - Irishtown Park
0U462	Booterstown-Merrion Gates	0UL56	Tolka 1-InnerTolka
0U465	Wooden Bridge-Causeway	0UL57	Tolka 2
0U466	North of Causeway (to saltmarsh)	0UL58	Tolka 3-Triangle
0U468	Dollymount Strand (including open water)	0UL59	Tolka 4-RockyShore
0U469	Sutton-Dinghy Club	0UL60	Tolka 5
0UL40	Sandymount Strand North	0UL61	Tolka 6
0UL41	Sandymount Strand South	0UL62	Tolka 7-Outer
0UL47	Kilbarrack	0UL63	Liffey Channel
0UL48	Sutton Strand South	0UL64	Alexandria Basin
OUL52	South Dublin Bay-Outer		

Rare Breeding Birds in Ireland in 2016



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Keywords: Breeding birds, rare birds, estimates, numbers, trends



Introduction

Since the publication of the last Irish Rare Breeding Birds Report (for 2014 and 2015) (Newton 2015) at the end of 2015, the new Panel co-ordinator/secretary, Gerry Murphy, has been stepping up his involvement with the workings of the IRBBP. He will have initiated e-mailing some of the regular contributors to this report, has trawled one of the most popular bird-reporting websites (irishbirding.com) and he will step up this contact and search effort through 2017. In this report, we have collated records from the 2016 breeding season and we also publish a few overlooked (or late) contri-

butions for 2015 along with a few for earlier years to complete the record. In addition to genuinely rare, scarce or declining breeding species we have continued to add records of nonnative species. Please forward observations for 2017 to Gerry Murphy at: secretary.irbbp@gmail.com and note that any other 'historical' material for earlier years is welcome as it helps to build up a comprehensive database of rare, scarce and declining species. All rare breeding bird information, both recent and historic, is regarded by the Panel as being strictly

Plate 184. Short-eared Owl in potential nesting habitat in southwest Ireland (Finola O'Sullivan).

Irish Birds 10: 383–390 (2016) 383

confidential. Even if you do not submit data to the Panel directly, but report it elsewhere, please remember to give as much 'proof of breeding' as you can: did you find a nest or see young (confirmed breeding), hear two males singing at the same time indicating strong territorial behaviour and acceptable as 'probable' breeding? Agitated birds or adults carrying nest material are other categories of probable breeding.

Membership of the IRBBP comprises: Stephen Newton (BirdWatch Ireland, Chairman), Gerry Murphy (Coordinator/Secretary), David Tierney (National Parks and Wildlife Service), Neil McCulloch (Northern Ireland Environment Agency), Chris Murphy (Northern Ireland Birdwatchers' Association), Paul Hillis (retired Honorary Secretary IRBBP), Kendrew Colhoun (Royal Society for the Protection of Birds) and Mark Holling (non-voting Secretary United Kingdom Rare Breeding Birds Panel).

Highlights of 2016 breeding season

Amongst the non-passerines, two ducks appeared to have had successful breeding seasons, notably Gadwall (scientific names in Species accounts) and Common Pochard. Proof of breeding for Northern Shoveler is increasingly rare, so the numbers at Portmore Lough were encouraging. The 'colony' of Whooper Swans at Lough Beg is a surprising development. Marsh Harriers were confirmed breeding in Wexford, and although this attempt failed, it is hoped that the species will become established in the southeast in future years. The two waders mentioned in the last report (Newton 2015), Little Ringed Plover and Red-necked Phalarope, appear to be established as regular breeders, albeit in very low numbers. The true status of the Common Curlew has been revealed after the completion of a national survey in the Republic of Ireland, and with only 122 to 150 pairs, awareness has been raised amongst the general public and politicians to the point where a 'Curlew Task Force' has been created. Short-eared Owls appeared relatively abundant and may have nested in the southwest. Great Spotted Woodpeckers had a really good year in Wicklow and neighbouring counties, and have expanded westwards reaching Sligo and look well established in Fermanagh. However, for several rare passerines 2016 was a very poor year: no Pied Flycatchers Ficedula bypoleuca or Common Redstarts Phoenicurus phoenicurus were recorded, only a single singing Wood Warbler and a single Ring Ouzel. The latter was well away from 'traditional' western haunts, but too late for an arriving migrant. To counter this, Bearded Tits, are now present and breeding at three reedbed ecosystems in the southeast.

Species accounts

Whooper Swan Cygnus cygnus

Antrim/Londonderry Five pairs confirmed breeding at Lough Beg with broods of three, three, two, two and one recorded, 27 July; also 29 non-breeding adults recorded.

Donegal One summering adult at Tory island, 10-12 June. Two pairs at Inch Lake, 8 July, one pair accompanied by a cygnet.

Lough Neagh/Londonderry One pair (no young), 17 July.

It is not known whether the Londonderry pair actually attempted to nest; more regular observations are required.

Black Swan Cygnus atratus

Donegal Two pairs at Inch Lake, 8 July, where this species has recently bred successfully; no proof of breeding in 2016.

Down One bird present all year at Lecale.

Wexford One summering bird at Tacumshin, from 5 April.

Greylag Goose Anser anser

Donegal One pair in suitable habitat at Tory Island, 10-12 June.

Limerick There is an established feral flock on the River Shannon at Castleconnell, and goslings were recorded in April.

Wexford The breeding attempts of the feral population at Lady's Island Lake are controlled around the tern colony; however, a post-breeding flock of 83 was counted there in early August, and two were present at Tacumshin in June.

Wicklow Two birds were present at Newcastle in June, and breeding may be expected in coming years.

Mandarin Duck Aix galericulata

Tipperary One female and five young at Kilsheelin, 16 June.

Wicklow An independent, well-grown juvenile on the River Dargle, Bray, 17 July; perhaps originated from a breeding site upriver where birds seen previously and breeding habitat is available.

This represents an extension to the breeding range of this non-native duck into County Tipperary. This species was added to the Irish List because of the presence of birds at Tollymore, County Down, although it now appears to be extinct in Northern Ireland.

Wood Duck Aix sponsa

Kerry One female seen at Ross Bay, Lough Leane, 30 July.

An intriguing observation of a non-native species at a good site for ducks.

Common Wigeon Anas penelope

Tipperary One pair at Lough Eorna, 15 June, and a female there, 30 June; but no evidence of successful breeding.

Wexford Up to three males regularly seen at Tacumshin, 2 May to 6 June, then a pair present on 18 June, but with no direct evidence of a breeding attempt.

Gadwall Anas strepera

Antrim Four pairs confirmed breeding at Portmore Lough.

Fermanagh Nine pairs probably bred within the Lower Lough Erne RSPB Reserve.

Galway One pair recorded at Lough Corrib, 6 June, but there were no subsequent observations.

Lough Neagh/Antrim Female with seven or eight young, first half of June; female with ten young, 24 June; three females with seven, three and one young, 5 July; two females with six and one young, 16 July.

Lough Neagh/Armagh Female with four young, 22 June; female with six young, 5 July; two females with four and two young, 16 July, and two unaccompanied young indicate that a third breeding attempt was successful in this area.

Lough Neagh/Armagh-Down Female with nine young, 16 July. **Lough Neagh/Tyrone** Six pairs recorded, 22 May.

Wexford 28 pairs nesting at Inish, Lady's Island Lake; no observations of young submitted; 11 summering birds at Tacumshin, 18 June.

Wicklow Five summering birds at Kilcoole, but no evidence of breeding.

Overall, a successful year at Lough Neagh and with excellent breeding numbers at Lady's Island Lake.

Pintail Anas acuta

Lough Neagh/Antrim One male in eclipse plumage, 5 July, was the only summering record reported.

Wexford Three males and one female at Tacumshin, 2 May; a male and female still present there, 8 May.

Garganey Anas querquedula

Antrim Two pairs at Portmore Lough on the wader meadows throughout the season.

Tipperary 2013 One male was present at Lough Eorna, 13 June.

Wexford Two males present at Tacumshin, 23 April, then a male seen apparently holding territory there between 24 April and 13 May, and two males there on 16 May; the only hint that breeding may have occurred was the observation of a female or immature type bird on 20 August. At Cahore, up to three males and two females seen on 24 April and through much of May, indicating probable breeding by two pairs; a pair flew into a reedbed together on 21 May, and the last observation was of two unsexed birds on 28 May.

Northern Shoveler Anas clypeata

Antrim Six pairs bred at Portmore Lough with broods of eleven, ten, nine and nine recorded; a further 25 'possible' pairs recorded at this site.

Louth Four at Stephenstown Pond, 30 May, and a pair seen nearby at Lurgangreen, 6 June.

Mayo Two pairs at Annagh Marsh, late April, and with a brood of six young, 10 June. Fledged juveniles (5) seen in autumn. A nest was recorded at Carricknaweelion, and one bird was seen on the Inishkea Islands.

Tipperary 2013 One pair present at Lough Eorna, 20 June, but no evidence of breeding.

Tipperary 2014 One male present at Lough Eorna, 31 May, and a female there on 23 July, but no evidence of breeding.

Tipperary 2015 None seen at Lough Eorna during 2015 season.

Tipperary One male was present at Lough Eorna, 15 June (2016), but there were no other observations.

Wexford One pair at Lady's Island Lake, 2 May, and a male there on 29 May, but no proof of breeding.

Common Pochard Aythya ferina

Lough Neagh/Antrim Two females with two and one young, 17 July. **Lough Neagh/Armagh** Three females with six, three and two young, 22 June; six females with nine, seven, two (x 3) and one young, 24 June; ten females with five, four, three (x 4), two and one (x 3) young, 5 July; 11 females with seven, four, three (x 3), two (x 5) and one, plus two motherless young (apparently same brood); and one attached to one of the broods of two, 16 July; one female with three young, 17 July.

Lough Neagh/Armagh-Down One female with five young, 22 June; two females each with two young, 16 July.

Lough Neagh/Londonderry One female with five and one young of markedly differing sizes, indicating two broods, 17 July.

Tipperary 2013 Between four and eight pairs present at Lough Eorna, up to 28 June, but no young recorded throughout season.

Tipperary 2014 One female with three well-grown young at Lough Eoma, 1 July, and three other pairs there from May to July, but no more young seen.

Tipperary 2015 One pair present at Lough Eorna, 12 June, but no evidence of breeding this season.

Tipperary One pair present at Lough Eoma, 25 May (2016), but no evidence of breeding this season.

Wexford 2015 Two pairs at Tacumshin, 4 May.

Overall, a successful season at Lough Neagh, but the situation at Lough Eorna is worrying with only a single pair in the last two years and no signs of breeding.

Common Eider Somateria mollissima

Donegal Two adults at Magheraroarty, 10 June.

Dublin Two males, two females and four young at Skerries, 31 May. **Galway** An occupied nest at Slyne Head, 27 May; two at nearby Duck Island in suitable breeding habitat.

Mayo Total of 27 nests located on following islands: Inishglora, Inishkeeragh and Carricknaweelion.

Common Scoter Melanitta nigra

Galway One unsexed bird reported at Lough Corrib, 11 May, and a male seen on an unspecified date in May.

Mayo Four birds seen at Lough Conn, 10 May.

More regular observations at these two key sites are needed to monitor this declining species, and similarly at Loughs Ree and Arrow.

Common Goldeneye Bucephala clangula

Lough Neagh/Armagh One female or male in eclipse plumage, 5 July.

Goosander Mergus merganser

Wicklow Two nestboxes successfully fledged seven and eight young on the Avonmore River. Five 'redheads' seen at Lower Lake Glendalough, 12 August.



Plate 185. Female Goosander with brood of ducklings, County Wicklow (Ann Fitzpatrick).

Quail Coturnix coturnix

Wexford 2015 A late season singing male at Tacumshin, evening of 22 July.

Breeding seems to have ceased in the Athy area (Kildare) given the conversion of arable land to dairying at this former stronghold (Jim Fox, personal communication).

Grey Partridge Perdix perdix

Down Two pairs (from birds reared and released in 2015) nested in the wild at Lecale; one pair successfully reared 9 young, the other pair lost its brood.

Dublin The new reintroduction site held 23 breeding pairs, and 44 individuals were estimated in the autumn population.

Offaly The population at Boora numbered 123 breeding pairs, and 244 individuals were estimated in the autumn population.

Two additional satellite Grey Partridge projects are now established in Counties Wicklow and Donegal, together with a third in Northern Ireland. At each site Grey Partridges were translocated from Boora after the establishment of suitable habitats.

Red-throated Diver Gavia stellata

Donegal Six occupied nest sites of which five produced young (four broods of one and one of two). One site failed twice due to flooding. Most sites only produced one chick as it appeared that they abandoned the second egg and concentrated on raising the first chick. This could be due to the bad weather conditions and the fact that these sites were three to four weeks later than the first breeding site that produced two chicks for the third year in a row.

Cattle Egret Bubulcus ibis

Wexford One summering non-breeder, from 5 April to 30 July.

Little Egret Egretta garzetta

Antrim/Londonderry A third breeding site identified in Northern Ireland with the confirmation of one pair breeding at Lough Beg for the first time.

Down Minimum of 45 adults at Northern Ireland's first known breeding site, 15 April; not known how many pairs bred, but this is the largest number seen to date in Northern Ireland.

Wexford Two pairs bred at Lady's Island Lake where they probably fledged three young.

Great Egret Egretta alba

Wexford One long-staying bird at Tacumshin was present until 12 June.

Glossy Ibis Plegadis falcinellus

Wexford One long-staying bird at Tacumshin, present until at least 18 Iune.

Spoonbill Platalea leucorodia

Wexford Two immatures at Tacumshin, 13 March to 23 May.

Although not a breeding record, this shows that these birds are present into the window encompassing the breeding season.

Red-necked Grebe Podiceps grisegena

Tipperary 2014 One adult present at an undisclosed site, 25 May to 23 July.

Tipperary 2015 The presumed same adult was present at the undisclosed site, 1 May to 21 July; on 25 May it shown aggression towards Great Crested Grebes *Podiceps cristatus*, but unfortunately no mate appeared.

Tipperary One present at the undisclosed site, 21 April to 30 June (2016).

Red Kite Milvus milvus

Down/Northern Ireland Twenty one pairs were recorded in the Province.

Dublin/Meath Six pairs were recorded, nests located and three young fledged, the best year to date.

Wexford Two pairs recorded in the county as Wicklow birds spread south.

 $\boldsymbol{Wicklow}$ Seventy one pairs recorded in the county.

The Irish population has now reached the 100 pairs milestone. Overall, in the Republic of Ireland, 79 territorial pairs, 44 of which laid eggs and 50 young were fledged, including three in Fingal (Dublin). Average brood size was 2.17, and 1.14 young were raised per laying pair. The maximum number of pairs per 10km square was a remarkable 26.

White-tailed Eagle Haliaeetus albicilla

Clare One pair bred, but was unsuccessful.

Cork One pair successfully raised a single chick.

Galway One pair successfully raised two chicks.

Kerry Six territorial pairs, with five confirmed nesting attempts; and from these three pairs successfully raised single chicks.

As White-tailed Eagles start to breed at about 4-6 years old it was expected that the first Irish nesting attempts would be in 2012. By early 2010 the first territorial pair of eagles had formed in southwest Kerry. This increased to four territorial pairs in 2011, six in 2012, ten in 2013, 14 in 2014, but declined to 13 in 2015 and nine in 2016. The first nesting attempt occurred in 2012 in County Clare, followed by the first successful breeding in 2013 with two chicks fledging from the same site. The number of breeding pairs and successful pairs has continued to increase annually. Nine pairs held territory in Ireland in 2016. At least eight pairs built nests and laid eggs. For the second year since breeding in the wild began in 2012, more than one pair successfully fledged chicks; five pairs hatched chicks across four counties with four pairs fledging a single chick each and one pair fledging two chicks.

Marsh Harrier Circus aeruginosus

Kerry One sighting at Reask wetlands, 24 May.

Wexford One pair bred at Tacumshin with both male and female present from 2 May and visiting the likely nest site from 13 May. Between 6-18 June food was being brought to the nest, presumably for hatched young, but by 3 July the attempt appeared to have failed (young died or depredated in nest), although both birds were present up to 30 July and the female was seen up to 13 August; the male but probably a second-summer bird.

Wicklow One female seen at Castlegrange, 22 May. An adult male and female/immature at Kilcoole/Newcastle; both birds watched for over an hour, flying around together and resting on the ground beside each other, male seen carrying dried grass and landing in suitable reedbeds. However, not seen during subsequent visits, so breeding not confirmed.

The best year in the Republic of Ireland for some time with a definite breeding attempt and a second potential pair in Wicklow.

Goshawk Accipiter gentilis

Wicklow One adult female seen in suitable breeding habitat near Enniskerry, 8 February; extensive subsequent searches failed to relocate the bird and it was presumed to be a winter visitor.

Golden Eagle Aquila chrysaetos

Northwest Ireland Six occupied territories, including four territorial pairs, and two single adults on site. Three pairs laid eggs, one pair failed during the egg stage and a second pair failed when the chick was seven weeks old — which was particularly disappointing. The third pair fledged a single chick, which was still accompanying the adults in September. Though the weather was quite wet this summer, it is assumed the weather itself did not cause the failures at the egg and chick stage. There are an increasing number of Golden Eagle sightings in Northern Ireland including some evidence of territorial behaviour.

Osprey Pandion haliaetus

Westmeath One observed at Lough Derravaragh, 30 May, probably a late returning Scottish bird.

Hobby Falco subbuteo

Wexford Up to two birds at Tacumshin, 13 May to 18 June, and one at Oldtown, Tomhaggard, 25 June.

Wicklow Up to four birds in Newcastle and Castlegrange area, 27 May to 3 June.

All records refer to second calendar-year birds, thought to be summering non-breeding individuals.

Corncrake Crex crex

Donegal At least eight calling males at Tory Island, 10-12 June; one calling Ballyliffin (Inishowen), 17 May; one at Aranmore Island, 21 May. **Galway** One calling male reported at Inishbofin, 3 May.

Meath One calling male at Slane Marsh, Oldbridge, 24 May.

Overall, the national population was estimated at 168 pairs, of which 60 were in west Connacht and 108 in Donegal. This represents a 27% decline in two years.

Avocet Recurvirostra avosetta

Wexford One at Lady's Island Lake, 29 May to 12 June.

Northern Lapwing Vanellus vanellus

Antrim 39 breeding pairs recorded in the greater Glenwherry wader management area.

Antrim/Londonderry 28 pairs nested at Lough Beg.

Donegal Several pairs nesting across Tory Island with recently fledged young seen, 10-12 June.

Dublin 16 nests at Rogerstown fledged five young.

Fermanagh 34 pairs nesting in the Lower Lough Erne RSPB Reserve, and a further 26 pairs in the 'Fermanagh Focus Area'.

Kildare Four to six pairs attempted to breed in cereal field on River Barrow in south Kildare; some apparently successful as two young seen in mid May.

Kilkenny Nine pairs nested at an undisclosed site.

Londonderry 67 pairs nesting at Lough Foyle.

Mayo 18 pairs made 25 nest attempts at Annagh Marsh, from which 18 young fledged; three pairs at Termoncarragh Lake, with four fledged young seen in late July presumed to be from the pairs recorded earlier. Offaly An estimated 75-80 pairs were nesting on the Grey Partridge Project site. Boora.

Wexford Two breeding pairs at Tacumshin, 18 June, one pair alarm calling/agitated and one pair with a single young chick seen.

Wicklow A poor year at Kilcoole Marshes, almost certain failure due to intense Fox *Vulpes vulpes* activity in neighbourhood of expanding Rabbit *Oryctolagus cuniculus* population.

European Golden Plover Pluvialis apricaria

Donegal Two at Sheshkinmore, near Rosbeg, 30 May, and although not a site with obvious plover nesting habitat, the timing would seem too late for Icelandic migrants.

Fermanagh A comprehensive survey on Aghatirourke RSPB Reserve, Cuilcagh Mountain, failed to detect any breeding plovers, and a similar result prevailed on adjacent areas of County Cavan.

Galway One seen in suitable nesting habitat at Redhill (M0827), 22 May.



Plate 186. Little Ringed Plover, 2015 (Kevin Collins).

Little Ringed Plover Charadrius dubius

Kilkenny 2015 One pair with four eggs, 26 May, subsequently depredated.

Kilkenny One adult returned, 26 May (2016), but did not appear to nest

Wicklow One pair present at Poulaphouca from 2 May, with four chicks seen on 16 June confirming breeding; four birds seen at Poulaphouca in the spring, a female and three males. A further one or two adults present in the area, so scope for more pairs to nest in future years.

Common Curlew Numenius arquata

Republic of Ireland The national survey commenced in 2105 was completed in 2016 and the updated breeding population was given as 122-150 breeding pairs. Key areas in the country include the Stacks Mountains in north Kerry, Lough Corrib and the bogs of the midlands, with smaller populations in Donegal, Monaghan, parts of south Leitrim and Lough Ree. Surveys in 2016 revealed: Donegal, one pair/occupied territory; Galway, six pairs/occupied territories, four of which probably reared young; Kildare, two pairs/occupied territories; Leitrim, five pairs/occupied territories, one of which probably reared young; Longford, one pair/occupied territory; Monaghan, four pairs/occupied territories, two of which probably reared young; Offaly, two pairs/occupied territories, two of which probably reared young; Roscommon, 16 pairs/occupied territories, six of which probably reared young; Sligo, two pairs/occupied territories, one of which probably reared young. Other observations, reported to the Panel include those listed below.

Antrim 44 confirmed pairs in the Glenwherry wader management area, but only four of these successfully hatched young.

Antrim/Londonderry None recorded breeding at Lough Beg. **Fermanagh** 38 confirmed pairs at the Lower Lough Erne RSPB Reserve, plus a further 16 pairs in the Fermanagh Focus Area.

Roscommon Twelve birds seen at Cloonfad Bog, Roosky, 6 May, the first sighting at this site for ten years; no breeding evidence reported.

Tipperary One pair at Littleton Bog (no date given).

Wicklow Three birds reported at Carrigower Bog, 23 July, were almost certainly early migrants.

Dunlin Calidris alpina

Donegal Two single birds seen in suitable nesting habitat at Tory Island, 10 June.

Fermanagh Two pairs possibly breeding at the Lower Lough Erne RSPB Reserve.

Mayo None breeding at Annagh Marsh or Termoncarragh.

Woodcock Scolopax rusticola

Fermanagh Present and probably breeding on four islands in the Lower Lough Erne RSPB Reserve.

Wexford One seen on Forth Common, 10 May, presumably in suitable nesting habitat.

Wicklow One almost certainly flushed from a nest in woodland near Vartry Reservoir, 25 May; two seen in likely breeding habitat, Deputy's Pass, 23 June.

Common Redshank Tringa totanus

Antrim One pair nested at Portmore Lough, with two fledged young seen, 17 June.

Antrim/Londonderry 64 pairs nesting at Lough Beg.

Donegal Several pairs nesting across Tory Island, 10-12 June, with recently fledged young seen.

Fermanagh 89 confirmed pairs nested at the Lower Lough Erne RSPB Reserve, plus a further two pairs in the Fermanagh Focus Area; none nested at Upper Lough Erne.

Wexford Three pairs nested at Lady's Island Lake.

Red-necked Phalarope Phalaropus lobatus

Donegal One seen at Tory island, 14 June.

Mayo At coastal site A two males and two females, 18 June, and a single nest located on 9 July, but was probably flooded. At site B a total of 28 birds including eight males was recorded, of which two pairs nested and a single juvenile was later located. Two seen on 19 May, presumed passage birds, at site D; then a pair copulating at site D on 10 June and a male seen incubating on 21 June with two females nearby. A single male was seen at a new site (E), 13 July.

Great Skua Stercorarius skua

Antrim One pair at Rathlin Island fledged two young.

Donegal Four birds at Inishtrahull, 6 May; four birds at Aranmore, 21 May; one territorial bird at Horn head, 25 May presumed to belong to a pair; one bird at Gola, 21 July; one bird at Rocky Point, 12 August. Overall, these observations indicate the likelihood of around seven pairs so far in the county, while many potentially suitable islands still remain to be surveyed.

Galway Two birds seen at Inishbofin, 22 May, presumed to be a territorial pair.

Mayo Extensive seabird surveys in the county completed in both 2015 and 2016 located at least eight breeding pairs; the pair at Erris Head fledged two young.

Sligo One territorial pair at Inishmurray, 22 May, presumed to have nested.

Little Tern Sternula albifrons

Donegal Four pairs nesting at Tory Island, 10-12 June; breeding success not monitored.

Galway A full survey of the south Connemara Islands SPA was undertaken and revealed 41 pairs nesting on four islands with poor productivity estimated at 0.10 chicks fledged per pair.

Louth No birds nested at the Baltray colony (Delahunty *et al.* 2016). **Wexford** About 200 individuals were present in Wexford Harbour early in the season, with an estimated 50 nests; these are thought to have failed. About 60 adults were present at a second site in May with 30 pairs presumed to have laid eggs but visits to check hatching and fledging success were not made. Additionally, four pairs were present at Tacumshin in May and June and may have nested.

Wicklow Breeding numbers at the Kilcoole colony were high, 143 pairs, but productivity was poor, 0.35 chicks reared per pair, with probable food shortage leading to starvation of chicks compounded by Fox depredation (Manley *et al.* 2016).

Black Tern Chlidonias niger

Wexford Adult in summer plumage at Lady's Island Lake, 11 May; juvenile at same site presumed to be a migrant, 19 August.

Roseate Tern Sterna dougallii

Antrim Single pair reared one young, Blue Circle Island, Larne Lough; this juvenile was re-sighted on migration in Wexford on 26 August. **Dublin** Total of 1,556 pairs nested at Rockabill Island, and these reared 0.66 young per pair, the poorest year on record (Burke *et al.* 2016). One pair nested at Dalkey Island, but the eggs were abandoned.

Wexford Total of 209 breeding pairs recorded at Inish, Lady's Island Lake, mid-May; these reared 1.08 young per pair (Daly *et al.* 2016).

Little Gull Hydrocoloeus minutus

Wexford Adult in winter plumage at Tacumshin, 23 April; adult in summer plumage and two first-summer birds at same site, 14 May; one of the latter was at Lady's Island Lake on same day.

Mediterranean Gull Larus melanocephalus

Antrim Five pairs nested at Larne Lough raising 11 chicks (2.2 per Apparently Occupied Nest).

Down None recorded at Strangford Lough, but two pairs at Belfast Lough, a new breeding location, raised five chicks.

Fermanagh One male was again present in a Common Gull *Larus canus* colony at Lower Lough Erne for the fifth year in a row.

Lough Neagh One adult was seen in flight at Padian Island.

Tipperary One pair present at an undisclosed site, 5 June, but no evidence of breeding was recorded.

Wexford A record total of 72 pairs nested at Lady's Island Lake.

Turtle Dove Streptopelia turtur

Wexford One bird reported from Ballycogley, 24 June, presumed migrant.

Barn Owl Tyto alba

Clare One bird seen at Dromoland, 24 June.

Northern Ireland The panel understand there are only three confirmed pairs in the Province, but the Ulster Wildlife Trust indicate

that there could be more ('less than 30-50') breeding pairs of Barn Owls in the Province; hopefully, their three-year conservation effort for this species will be rewarded (Fegan 2016).

Wicklow One bird seen near Delgany, 18 May, an area with previous sighting but no nest site has been tracked down.

Long-eared Owl Asio otus

Dublin One seen by the Grand Canal Way in Lucan. This species is very under-reported.

Short-eared Owl Asio flammeus

Cork and Kerry Birds present at five sites in the Mullaghareirk Mountains and environs, with breeding suspected at one of these, and at a further site in the Nagle Mountains.

Elsewhere, an apparently good year for this species in Ireland with a wide spread of mostly coastal 'summering' birds: two, Wexford (Tacumshin and Cahore), three, Wicklow (coastal at Castlegrange/Killoughter; inland at Blainroe Upper and Barndarrig), one, Dublin (Balbriggan), one, Donegal (Tory Island), one, Fermanagh (Upper Lough Erne), one, Cork (inland at the Gearagh). The abundance of birds in Ireland may be linked to a poor year for voles and owls in Scotland.

Great Spotted Woodpecker

Dendrocopos major

Carlow Breeding confirmed at two sites.

Down Three juveniles ringed in a Downpatrick garden on 3 July indicted that breeding had occurred nearby.

Fermanagh Drumming birds heard at six locations in the county and (unconfirmed) breeding was recorded at two of these sites.

Louth One site with possible breeding.

Monaghan Birds recorded at two sites, including a pair at Rossmore

Sligo One bird reported at Union Wood, 1 June, the most westerly site in the country.

Wexford Breeding confirmed at two sites.

Wicklow Breeding confirmed at 41 sites, 15 sites with probable breeding and birds/pairs seen at a further 20 sites. Thus, a total of 76 territories recorded in the county.

Bearded Tit Panurus biarmicus

Wexford Two males and two females recorded at Tacumshin in winter, and three fledglings seen, 23 July; up to seven birds seen at Cahore, 5 May, a male with two or three juveniles were reported in October/November, indicating that breeding probably occurred at this site.

Wicklow One pair seen at Castlegrange, with the male carrying food indicating an active nest nearby.

Wood Warbler Phylloscopus sibilatrix

Wicklow Only one report of a singing male at Tomnafinnoge Wood, Shillelagh, 13 May.

Garden Warbler Sylvia borin

Cavan Eleven territories recorded around Lough Sheelin, 9 June.

Cork An undated report of one holding territory at Ovens, west of Cork Citv.

Fermanagh Five singing, Lower Lough Erne Islands RSPB reserve, 12 May; two singing at Magho Cliffs, 8 June.

Monaghan One singing male at Emyvale, 21 May.

Sligo One seen at Collooney, 11 June.

Savi's Warbler Locustella luscinioides

Wicklow Male singing at Castlegrange reedbed, 22-27 May.

Common Reed Warbler

Acrocephalus scirpaceus

Antrim 28 singing males (territories) recorded at Portmore Lough, 27 May.

Kildare Two males singing in small reedbeds by River Barrow in south Kildare about 1.5 km apart, early June; the first occurrence in this part of the county.

Wexford At least five singing males in the Tacumshin area, with an adult carrying food, 14 August; at least three males singing at South Slob, 15 May; two singing at different locations in Wellingtonbridge, 3 and 17 July; 20 males were in song at the Cahore marshes, 2 May.

Wicklow Total of seven singing/territorial males in the area between Castlegrange and Kilcoole; recently fledged young continue to be mistnetted at the East Coast Nature Reserve Constant Effort Ringing Site in the middle of this area.

Ring Ouzel Turdus torquatus

Wicklow One male recorded at the Little Sugar Loaf, 14 June, is the only record received.

Whinchat Saxicola rubetra

Antrim 2015 Five pairs reported in the Glenwheery area.

Antrim Nine pairs reported in the Glenwheery area in 2016.

Donegal Two seen at Doochary on the Rosses, 4 June.

Kildare 2014 Six pairs in June, with nesting near Cloney.

Kildare 2015 Three males in June at Cloney, but meadows recently

Wexford Two females reported at Lady's Island Lake, 4 May, are presumed newly arrived migrants.

Wicklow Up to seven adults seen at the Coronation Plantation between 15 May and 22 June, indicating three or four pairs; a total of 15 birds reported at this site on 17 July, presumably includes fledged young.

Yellow Wagtail Motacilla flava

Cork One reported from Old Head of Kinsale, 15 May, a presumed newly arrived migrant.

Donegal Four seen at Tory Island, 5 May, presumed migrants.

White Wagtail Motacilla alba alba

Donegal Three seen at Tory Island, 18 May, but no further details — were they heading for Iceland?

Twite Carduelis flavirostris

Antrim Three birds reported at Fair Head, 16 June; no further information but this could be a breeding area.

Mayo Two territories reported in the Portacloy area, 11 August; at one, an adult was accompanied by three juveniles.

Wicklow Three birds seen at Newcastle, 7 May, are presumed migrants.

Common Crossbill Loxia curvirostra

Cork Fifteen birds seen in suitable nesting habitat, Blue Pool Wood, Glengariff, 16 April.

Wexford One bird seen in suitable habitat at Forth Mountain, 28 February.

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Irish Rare Bird Report 2015

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Introduction

This report adds three species to the Irish List, two from the current year (Black Scoter *Melanitta americana* and Hudsonian Godwit *Limosa haemastica*) and one from 2013 (Bulwer's Petrel *Bulweria bulwerii*). It also confirms the previously announced decision to reassign Red-breasted Goose *Branta ruficollis* to Category A of the Irish List from Category D, following a review of one at North Slob, Wexford from October 1997 to March 1998 (www.irbc.ie/announcements/announce79.php).

A Bulwer's Petrel off Galley Head, Cork on 1st August 2013 becomes the first record of this pan-oceanic petrel. This record took longer than usual to assess in order to allow time to seek the opinion of several seabird experts. Consequently, the committee would like to thank both Bob Flood and Steve

N.G. Howell for their considerable help and advice with this record.

In Kerry, a male Black Scoter was discovered in Dingle Bay off Rossbeigh in January. It remained until early April, returning the following October to Rossbeigh, and to Waterville for a couple of days in November. White-winged Scoter *Melanitta deglandi* was added to the Irish List at the same location in 2011 (*Irish Birds* 9: 453) and the same birder was involved in both discoveries.

Galway has added six species to the Irish List since 2007, and now adds Hudsonian Godwit. It was found in the west of the county at Inishdawros in July, where it remained for just

Plate 187. Hudsonian Godwit *Limosa haemastica*, Ballyconnelly, Galway, July 2015 (Dermot Breen).

Irish Birds 10: 391–428 (2016) 391

a single afternoon, disappointing all those hoping to add the species to their Irish list. Fortuitously and quite remarkably, the same individual reappeared the following September on the Aran Islands, where it remained for three days allowing many grateful birders twitch what had previously proved a lost cause

These additions continue an unbroken sequence of new species added to the Irish List since 1976. In the main this involves new records, although others have been the result of new data emerging from time to time that elevates subspecies to full species status. The Irish List now stands at 478 species with another eleven placed in Category D and two in the 'At sea' category. A pdf copy of the Irish List is available for download through the IRBC's website at www.irbc.ie/topbar/categories.php, where an explanation of the category system in use is outlined also.

Other notable records in this report include; the second Slaty-backed Gull *Larus schistisagus* (Donegal), third Cedar Waxwing *Bombycilla cedrorum* (Clare) and Ovenbird *Seiurus aurocapilla* (Cork), fourth Cetti's Warbler *Cettia cetti* (Wicklow) and Dark-eyed Junco *Junco byemalis* (Cork), fifth Red-flanked Bluetail *Tarsiger cyanurus* (Cork) and Twobarred Crossbill *Loxia leucoptera* (Mayo), fifth and sixth Hooded Mergansers *Lophodytes cucullatus* (Donegal) and sixth Pallid Harrier *Circus macrourus* (Mayo) and Elegant Tern *Sterna elegans* (Kerry).

The backbone of the IRBC's system for recording occurrences of rare birds in the Republic of Ireland is the Provisional List, published online at www.irbc.ie/provisional/provisional.php, which is updated regularly. Most of the data in this report were taken directly from the 2015 Provisional List. The IRBC expresses its sincere gratitude to all those who provided information during 2015, either directly or indirectly. The committee also extends its grateful thanks to Kieran Fahy, Kieran Grace, Aidan G. Kelly and Killian Mullarney for their invaluable assistance.

Rarity Description forms may be downloaded from the IRBC website: www.irbc.ie/records/records.php.

Submission of photographs: We welcome photographs of rare and scarce birds, which can be sent to photoArchive@irbc.ie.

Rarities: The full list of taxa requiring substantiating documentation can be found at www.irbc.ie/records/desclist.php. For a full explanation of the background and purpose of the list, see *Irish Birds* 7: 413-418 or online at:

www.irbc.ie/announcements/announce1.php.

2015 Systematic List

The sequence and scientific nomenclature largely follows British Ornithologists' Union (2013), but also incorporates recommendations of the Taxonomic Advisory Committee of the AERC (Crochet *et al.* 2010, 2011, 2012, 2015) and the Taxonomic Sub-committee of the British Ornithologists' Union (Sangster *et al.* 2013, 2015, 2016). Further details of taxonomic changes adopted by the IRBC can be viewed by consulting the Announcements page on our website at www.irbc.ie/announcements/announcements.php.

The three numbers in parentheses after each species refer respectively to (a) the total number of birds up to 31st December 1949; (b) the total number of birds from 1st January 1950, up to, but excluding, the current year — where this total is enclosed in square brackets, totals are from 1st January 2010 only; (c) the total number of new individuals for the current year. Some totals are minimum figures due to lack of precise numbers in historical texts — where this is the case, the total is succeeded by a '+'. In addition to the species totals, the total number of individuals being added to the species total is included immediately following the county name. Please note that the finder's credits are placed in alphabetical order.

Tundra Bean Goose Anser fabalis rossicus (0; 31; 1)

Mayo One: One, Roonagh Lough, Louisburgh, 30th to 31st May, photographed (P.Lonergan).

It is possible this is one of two that were at the Mullet Peninsula from January to March 2012 (*Irish Birds* 10: 73), but is here treated as different in the statistics.

Taiga/Tundra Bean Goose

Anser fabalis fabalis/rossicus (0; 1; 1)

Cork One: One, Dursey Island, 29th October (P.Moore, D.O'Sullivan). This goose was observed in flight only and the views obtained precluded subspecific identification.

Russian White-fronted Goose

Anser albifrons albifrons (51; 112; 0)

Wexford Zero: One, North Slob NNR, 22nd February (P.Kelly), presumed to be the same individual that was present in December 2014 (*Irish Birds* 10: 237).

In contrast to the Greenland race *flavirostris*, the smaller nominate form of White-fronted Goose is a rare winter visitor, mainly to Wexford, which accounts for 54 records or 33% of the total. Occurrences have consisted of small groups of up to

nine individuals, with the exception of a group of about 50 at Ballough and Rogerstown in north Dublin during a period of severe winter weather in January and February 1947 (Kennedy et al. 1954). There has been a steady decrease in numbers wintering in Britain, with a reduction of 71% from 1987/88 to 2012/13 and 38% from 2002/03 to 2012/13 (Hayhow et al. 2015), which presumably has a knock-on effect on numbers reaching Ireland.

Snow Goose *Anser caerulescens* (70; 49; 1) **Wexford** One: One, Cahore Marsh, 22nd April (R.Vaughan).

Following an absence of eight years from 1994 to 2001, Snow Goose has occurred annually since 2002, with birds in Donegal (two), Kerry (one), Londonderry (one) and Wexford (four); some of these are presumed to be regularly returning individuals over a number of years. Snow Geese often arrive in the company of Greenland White-fronted Geese *A.a. flavirostris*, which probably explains why Wexford and, in particular, the Slob Lands account for over half of the records.

Cackling Goose Branta hutchinsii (0; 27; 1) Sligo One: One, Lissadell, 23rd December to 19th March 2016, photographed (D.Skehan et al.).

2014 Sligo Zero: One, Lissadell, 30th October to 30th January 2015 (S.Feeney *et al.*), presumed returning.

The 2014 Lissadell individual is presumed to be one of three birds that were present in the same location in 2013 (*Irish Birds* 10: 74).

Canada Goose Branta canadensis (0; 36; 1)

Sligo One: One, of the race *interior*, Lissadell, 17th November to 19th March 2016, photographed (M.Casey *et al.*).

Wexford Zero: One, North Slob NNR, from 29th October 2014 (*Irish Birds* 10: 238) remained to 20th March (A.Walsh *et al.*).

The IRBC undertook a review of Canada Goose records between 1969 and 2009, which identified five records (involving six birds) of *B.c. interior*, known as Todd's Canada Goose (IRBC 2013) and this is the first since then. This form can be separated from the nominate by its smaller size, overall darker mantle, back and underparts and the absence of an obvious whitish neck ring and can often show a dark gular stripe under the chin.

Cackling/Canada Goose

Branta hutchinsii / canadensis (0; 61; 0)

1985 Londonderry Seven: Seven, Myroe Levels, Lough Foyle, 21st to 28th October (D.Allen).

This group was not assigned to a particular race and were recorded before Cackling Goose was split from Canada Goose (www.irbc.ie/announcements/announce43.php). However, they were considered to be 'undoubtedly of wild origin' and

'all seven were small and dark' and they 'are best treated as small Canadas' (NIBA 1987), possibly indicating the record involved Cackling rather than Canada Geese.

Black Brant Branta bernicla nigricans (0; 39; 0)

Kerry Zero: Adult, Castlegregory, from 21st December 2014 (*Irish Birds* 10: 238) remained to 25th February, photographed (S.Enright); One, Ventry, 10th to 22nd March, photographed (M.O'Clery *et al.*); Adult, The Spa, Tralee, 24th September to 14th October, photographed (D.A.O'Connor *et al.*); Adult, Castlegregory, 30th November (M.O'Clery). All presumed to relate to two returning and wandering individuals.

Kerry has recorded four since the first for that county at Castlegregory in 2001 (*Irish Birds* 7: 216). It is presumed that all of them have returned and wandered the county at various times in the intervening years. An analysis of Black Brant occurrences was presented for the first time in the 2012 IRBR (*Irish Birds* 9: 580 & 611).

Red-breasted Goose

Branta ruficollis (0; 1; 0)

1997 Wexford One: Adult, North Slob NNR, 26th October to 16th March 1998.

As there was some doubt regarding the provenance of this bird it was originally consigned to Category D of the Irish List (*Irish Birds* 7: 107). Recently, new evidence provided by the finder to the IRBC prompted a reassessment. As a result, the committee has reassigned the record to Category A of the list, making it the first, and to date only Irish record of this Eurasian goose.

Ruddy Shelduck

Tadorna ferruginea (75; 0; 0)

1892 Down One: One, near Comber, 21st or 22nd June, shot (Deane 1954).

A summer drought across southern and southeastern Europe in 1892 appears to have been the cause of a widespread northward movement of Ruddy Shelduck, with some even reaching as far as Iceland and Greenland (Ussher & Warren 1900). At least 51 were recorded across nine Irish counties that year during June, July and August with a single straggler remaining to October. The Comber bird was not published in the standard literature on Irish records (Ussher & Warren 1900, Kennedy *et al.* 1954, Ruttledge 1966), but its date of occurrence coincides with the invasion and the likely explanation is that it was overlooked rather than considered suspect. It was stated by Deane (1954) that the specimen was mounted by James Sheals, one of Belfast's best known 19th century taxidermists.

Irish Birds 10: 393—428 (2016)

American Wigeon Anas americana

(0; 137; 5)

Cork Zero: Male, Harper's Island, from 14th December 2014 (Irish Birds 10: 238) remained to 2nd March, photographed (T.Gittings et al.).

Donegal Zero: Male, seen at Culdaff Estuary and also at Malin Town, from 13th October 2014 (Irish Birds 10: 238) remained to 18th February, upon which date it was seen at Trawbreaga Bay, photographed (M.McLaughlin, R.McLaughlin et al.), then, presumed same, Culdaff Estuary, 24th October, Lough Swilly, 19th December and Malin Town, 28th December (T.Campbell, R.Murray, B.Robson), presumed returning.

Galway One: Male, Belclare Turlough, 24th January to 12th February, photographed (D.Breen).

Kerry One: Male, Inny Strand, Waterville, 13th to 29th December, photographed (P.McDaid et al.).

Leitrim Zero: Male, Tullaghan, from 17th October 2014 (Irish Birds 10: 238) remained to 18th March (F.Cross et al.), then, presumed same, Tullaghan, 24th October to 17th March 2016 (M.Davis, D.Skehan et al.), presumed returning.

Wexford Three: Male, Cahore Marsh, 30th January to 8th March, photographed (B.Power); Male, Tacumshin Lake, 11th to 30th April, photographed (P.Kelly et al.); Male, Tacumshin Lake, 6th September to 1st November, photographed (P.Kelly, K.Mullarney et al.).

The male found at Tacumshin Lake on 6th September by Paul Kelly was initially observed in eclipse plumage, before moulting to winter plumage by the end of September. The last year that failed to record this Nearctic duck was 1981 and it has occurred in 43 of the 61 years since the first in 1954. The largest congregation was of thirteen at Akeragh Lough, Kerry between 6th and 12th October 1968 (IBR 16: 18-19). One of these, shot on 12th October, had been ringed near Jemseg, New Brunswick, Canada on 29th August 1968. Another was observed on 9th October to arrive in an apparently exhausted state from high over the sea to the west, before alighting on the lake.

Lesser Scaup Aythya affinis (0; 32; 5)

Cavan One: Male, Pharisee Lough, 19th February to 19th March, photographed (J.Donaldson et al.).

Cork One: Female, The Gearagh, 10th December (A.Duggan).

Kerry One: Male, Lough Gill, from 22nd October 2014 (Irish Birds 10: 238) remained to 19th February (D.Farrar et al.), then, presumed same, Lough Gill, 16th October to 21st December (D.Farrar, M.O'Clery et al.), photograph Birdwatch 274: 14, presumed returning; Female, Lough Gill, 2nd to 24th January (E.Carty et al.).

Mayo One: Male, Lough Doo, Achill Island, 18th to 19th October, photographed (M.O'Briain).

Sligo One: Male, Lough Gara, 8th March to 9th April (S.Feeney,

The Lough Gill male, first recorded in 2011 (Irish Birds 10: 239), returns for the fifth time. Its first occurrence coincided with that of a female and it is possible the bird present through much of January is that female returning, but is here treated as different in the statistics.

King Eider Somateria spectabilis (4; 21; 1)

Mayo One: First-winter male, Annagh Head, Mullet Peninsula, 20th September, photographed (D.Suddaby et al.).

This is the eighth record for Mayo. Not surprisingly, for a species that breeds on high-Arctic coasts and islands, the majority have been in the northern half of the island. The exceptions are two in Cork (1959 & 2014), two in Kerry (2001 & 2011) and a single Wexford record (2008). There has been a general increase in numbers since 2000, when just over half of all records have been recorded (fourteen out of 26). The same adult male is presumed to have occurred regularly off Rosbeg, Donegal between 1974 and 1982.

Black Scoter Melanitta americana (0; 0; 1)

Kerry One: Male, Mountain Stage, near Rossbeigh, 8th January to 3rd April (D.Farrar, M.O'Clery et al.), then, presumed same, Rossbeigh, 10th to 30th October (D.Farrar, M.O'Clery), and, Waterville, 26th to 27th November (M.O'Clery), (O'Clery & Farrar 2015), photographs Birdwatch 273: 12, Wings 77: 26.

While scanning a small flock of Common Scoter M. nigra at some distance off Mountain Stage, near Rossbeigh on 8th January 2015, Davey Farrar picked up a scoter with what looked like a prominent yellow 'golf-ball' adorning the upper surface of the bill. He was aware of the existence of aberrant Common Scoters with more extensive yellow on the bill than usual having occasionally been mistaken for Black Scoter, but after watching this bird for some time he felt that it looked sufficiently promising to merit a phone-call to Killian Mullarney for some advice. Davey asked him what exactly he should be looking for to determine whether the bird was a Black Scoter, or an aberrant Common Scoter. Killian explained that the bill-shape should offer some clues and the yellow patch should extend squarely to the forehead, whereas in most aberrant Common Scoters the yellow patch gives way to the slightly swollen dark 'knob' at the base of the bill. Other details that could help the identification process were impossible to judge in the adverse weather conditions. However, after about another hour of scrutinising the bird for small clues Davey came away thinking that it almost certainly was a Black Scoter, but better views would be required to be absolutely certain.

He returned the following day with Michael O'Clery and despite the continuing bad weather they managed to relocate the 'yellow-billed' scoter in a flock of about 65 Common Scoter. Viewing conditions were atrocious, with rain and mist and a heavy sea-swell running, which meant that observations were intermittent and often frustrating. They persevered for about three hours, at which point they felt they had seen enough to conclude that it was indeed a Black Scoter, a first for Ireland. Their concerns that it might have been a hybrid or an aberrant Common Scoter were assuaged by a combination of features including the extent and shape of the yellow on the bill and the bird's subtly different jizz compared to



Plate 188. Lesser Scaup *Aythya affinis*, with Tufted Ducks *A. fuligula*, Achill Island, Mayo, October 2015 (Micheal O'Briain).

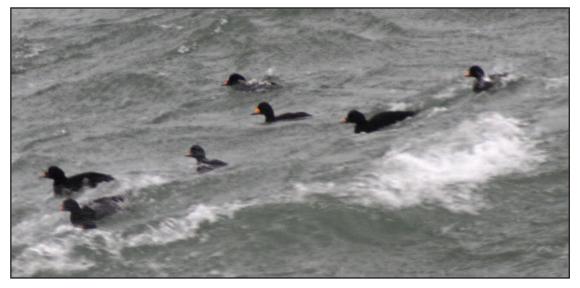


Plate 189. Black Scoter *Melanitta americana*, with Common Scoter *M. nigra*, Rossbeigh, Kerry, January 2015 (Tom Shevlin).

Common Scoters alongside. This gave them the confidence to release news of the bird as 'showing all the characteristics of Black Scoter and none of the characters of a hybrid/aberrant bird'. The bird attracted a lot of interest over the subsequent days and weeks, while improved weather conditions permitted much better views and even good photographs. These established beyond doubt that it was an adult male Black Scoter. It remained until 3rd April, and then returned the following October to the same location, as well as off Waterville Golf Links for at least two days in November.

Black Scoter breeds in Siberia from east of the River Yana to the Bering Sea, in Alaska and parts of central and eastern Canada. It is a vagrant to the Western Palearctic but has occurred in most countries of north and west Europe, from Spain to Poland, with several countries accumulating multiple records. The distribution of records in the Western Palearctic, in particular, the fact that it has never been recorded in Iceland, suggests that birds occurring in Europe might arrive from the east, rather than from across the Atlantic. Black Scoter winters on north Pacific coasts, the Great Lakes, Gulf of Mexico and the Atlantic coast of North America. Previously regarded as a race of Common Scoter, it was recognised as a full species by the IRBC in October 2005 (www.irbc.ie/announcements/announce38.php).

Surf Scoter Melanitta perspicillata (6; 212; 4)

Kerry One: Female or immature, Rossbeigh, 10th to 11th October (M.O'Clery *et al.*).

Louth One: Adult male, The Hermitage, from 12th October 2014 (*Irish Birds* 10: 239) remained to 26th March, photographed (G.O'Neill *et al.*), also seen in Meath; Female, Clogher Head, 25th to 31st January (P.Kelly).

Meath Zero: Adult male, Ben Head, 12th to 21st March (A.G.Kelly, E.O'Donnell *et al.*), also seen in Louth.

Wexford Two: First-winter male, Rosslare Harbour, 17th January to 17th March, photographed (P.Kelly *et al.*); First-winter female, Rosslare Harbour, 24th January to 7th February (A.G.Kelly *et al.*).

It is possible that the female off Clogher Head in late January is the same as one that had been present off The Hermitage, Louth on 22nd November 2014 (*Irish Birds* 10: 239) but is here treated as a new bird. Surf Scoter has occurred in all months and off all counties with a coastline except Leitrim and Limerick. It has also occurred inland in Armagh (Oxford Island, Lough Neagh) and Fermanagh (Lough Erne). These are typical dates as 199 of the previous 218 occurred from October to April. Of the remaining nineteen; six were in May, four each in June, August and September and just a single July record of a female off Inch Strand, Kerry in 2013 (*Irish Birds* 10: 76).

Hooded Merganser

Lophodytes cucullatus (3; 1; 2)

Donegal Two: Pair, South Lake, near East Town, Tory Island, 19th to 23rd May (A.Meenan *et al.*), (Meenan 2015), photographs *Birdwatch* 277: 11, *Wings* 78: 29.

In the days prior to their discovery, a series of westerly gales had swept across Tory Island, strong enough to prevent the ferry sailing on 18th May. On the following day Anton Meenan noticed an unfamiliar duck with a white head on South Lake near East Town. Fortunately he was in the habit of taking pictures of unusual birds he encountered and when he later checked his *Collins Bird Guide* (Svensson *et al.* 2009) realised it was a Hooded Merganser. In fact, it turned out there was a pair, and over the next few days, a series of pictures by visiting birders revealed that neither was carrying rings and clearly showed their wings to be in perfect condition. Other factors in favour of genuine vagrancy include:

- A considerable increase in the species population. BirdLife International reports an extraordinary 1100% expansion in the 40 years to 2007, equating to an increase of 85.9% per decade (BirdLife International 2016).
- Their arrival coincided with an influx of Nearctic vagrants in late spring and early summer of 2015. This report includes Grey-cheeked Thrush *Catharus minimus* in May, Cedar Waxwing *Bombycilla cedrorum* and Dark-eyed Junco *Junco byemalis* in June and Hudsonian Godwit *Limosa haemastica* in July. In Britain, there were records of Veery *Catharus fuscescens* and Dark-eyed Junco in May, Hudsonian Whimbrel *Numenius budsonicus*, three Cedar Waxwings and two Swainson's Thrushes *Catharus ustulatus* in June and a Least Sandpiper *Calidris minutilla* in July (Hudson & the Rarities Committee 2016).
- The pair was short-staying in a predictable geographic location for spring Neartic vagrants. In addition, later in the



Plate 190. Hooded Mergansers Lophodytes cucullatus, Tory Island, Donegal, May 2015 (Aidan G. Kelly).

autumn there were claims of the same species from Azores (two), Iceland and Faroe Islands.

• The pair was extremely wary, even more so than Tufted Ducks *Aythya fuligula* present on the same lake.

This is the second time a pair has arrived on our shores. The first Irish and Western Palearctic record involved two that were shot at East Ferry, Cork Harbour in December 1878. Just over two years later in January 1881 a female was shot off Ballylongford, Kerry (Ussher & Warren 1900). The only 20th century record was a female or immature at Acton Lake, Armagh on 21st December 1957 (*IBR* 5: 8). In addition to these, there have been some sightings of presumed escapes carrying colour leg-rings.

Ruddy Duck Oxyura jamaicensis (0; [6]; 0)

Dublin Zero: Female, Swords, Knock Lake and Balrothery, from 29th December 2014 (*Irish Birds* 10: 239) was at Swords, 29th December 2014, Knock Lake, 30th December 2014 to 8th January and Balrothery, 12th January (P.Kelly *et al.*).

More details of this previously published record are presented here. Historically, three pairs of this Nearctic duck were imported to the WWT Reserve at Slimbridge, Gloucestershire in 1948 (Hudson 1976). Many subsequent generations remained full-winged and managed to escape, establishing feral breeding populations across much of lowland Britain (Parkin & Knox 2010). In Ireland, breeding was confirmed at Oxford Island, Lough Neagh, Armagh in 1973 (Culbert & Furphy 1978). Prior to being removed from the rarity list in 1989 it was recorded annually from 1979 to 1988 in Irish Bird Reports. In those years numbers were generally small (seven or fewer), although sixteen were at Portmore Lough, Antrim in November 1987 and 30 at Lady Bay, Lough Neagh, Antrim the following month (Irish Birds 3: 619). By the mid 1990s, overall numbers had peaked at about 200 and a tentative estimate at the breeding population during the years 1995 to 1998 was about 50 pairs (Perry et al. 1998). It has now become very scarce, probably as a result of an eradication program in Britain designed to remove the possibility of hybridisation with the globally threatened White-headed Duck O. leucocephala. Statistics are given from 1st January 2010 only, when it was reinstated to the rarity list (www.irbc.ie/announcements/announce47.php).

Fea's/Zino's Petrel

Pterodroma feae/madeira (0; 101; 6)

Cork Five: One, Galley Head, 2nd August (P.Connaughton); One, Toe Head, 2nd August (A.Duggan); One, Ballycotton, 2nd August (D.O'Sullivan); One, Galley Head, 3rd August (N.T.Keogh, B.Porter et al.); One, one mile south of Galley Head, 9th August (P.Connaughton, H.Hale et al.), photograph Wings 79: 29.

Mayo One: One, Kilcummin Head, 23rd August (J.Donaldson). Included is the tenth record for Mayo and the sixth off

Kilcummin Head. The possibility that some of these involve the same individual cannot be entirely discounted, however in the absence of multiple sightings of a distinctive bird they are treated here as separate records.

Bulwer's Petrel Bulweria bulwerii (0: 0: 1)

2013 Cork One: One, Galley Head, 1st August (A.Jeffery, P.Moore, D.O'Sullivan).

If the forecast of strong southwesterly winds were not enough to tempt seawatchers to Galley Head on 1st August 2013, then news of three Fea's type Petrels *Pterodroma feae/madeira* there the previous day would surely do it? In recent years, the first big blow of the autumn tends to produce these gadfly petrels off west Cork, but on this occasion the best bird was a Bulwer's Petrel that was watched by three stunned birders as it passed below them at a range of about 300 metres.

The summer of 2013 produced the warmest July on record and, more significantly, the sea temperature reached a record high of twenty degrees in the second half of the month off the south and west coasts (Met Éireann monthly summary). Some indication of the effect these abnormal temperatures had can be illustrated by reports from Dingle fisherman who had difficulties preserving catches in their vessel's holds due to the warming effect of sea temperatures. There seems little doubt these conditions influenced a warm water species like Bulwer's Petrel to venture much further north than usual.

Other seabirds from more southern parts recorded as close as Britain in 2013 were a Red-billed Tropicbird *Phaethon aethereus* off Cornwall in August, an Ascension Frigatebird *Fregata aquila* in Argyle in July and a Bridled Tern *Onychoprion anaethetus* in various locations throughout July and August (Hudson & the Rarities Committee 2014).

The IRBC undertook a review of the four previous claims of Bulwer's Petrel in 2015, and concluded that none could be considered proven and the species was removed from the Irish List (Moore 2015). Thankfully that short absence is over and this becomes the first Irish record.

Macaronesian Shearwater

Puffinus baroli (1; 22; 1)

Cork One: One, Toe Head, 12th August (A.Duggan).

The sixth record for Cork but the first there since 1993. Although August has by far the most records with nineteen, this record is the earliest in that month and there are just two others before the 21st.

In the 1990s the IRBC undertook a review of existing Macaronesian Shearwater records (then known as Little Shearwater), which concluded that only eight of the 42 records remained acceptable. The full review can be found on the IRBC's website (www.irbc.ie/announcements/announce7.php).

Wilson's Storm-petrel

Oceanites oceanicus (2; 265; 8)

At sea Zero: One, approximately 60 nautical miles west-southwest of Slyne Head, Galway, 21st April (A.Bennison, N.T.Keogh); One, eighteen nautical miles southwest of Galley Head, Cork, 15th August (P.Connaughton).

Cork Eight: One, Mizen Head, 8th August (D.Ballard); One, south of the Stag Rocks, 9th August (P.Connaughton *et al.*); One, Toe Head, 9th August, photographed (P.Connaughton *et al.*); One, Mizen Head, 12th August (D.Ballard); One, eight nautical miles southwest of Galley Head, 15th August (P.Connaughton); One, five nautical miles southeast of the Baltimore Beacon, 16th August (E.A.MacLachlainn *et al.*); Two, six nautical miles southeast of Sherkin Island, 29th August (S.Enright, C.Foley *et al.*).

The April 'at sea' observation was made from the *RV Celtic Explorer* during its 2015 transatlantic research cruise and is the first for that month in Ireland. All previous records occurred between late June and early October. This sighting suggests that Wilson's Storm-petrel may possibly be present off Ireland during more of the year than previously suspected.



Plate 191. Wilson's Storm-petrel *Oceanites oceanicus*, six nautical miles southeast of Sherkin Island, Cork, August 2015 (Seamus Enright).

Continental Cormorant

Phalacrocorax carbo sinensis (0; 39; 11)

Cork One: Second calendar-year, Lough Aderry, 24th November, photographed (H.Hussey, K.O'Driscoll).

Kerry Two: Second calendar-year, Cromane Harbour, 10th January, photographed (M.O'Clery); A different second calendar-year, Cromane Harbour, 7th March, photographed (S.Enright).

Limerick Two: Two, Merchant's Quay, Limerick City, 22nd February, photographed (T.Tarpey).

Wexford Three: Adult, Rosslare Harbour, 18th January to 15th March, photographed (P.Kelly), presumed returning; First-winter, Rosslare Harbour, 8th February to 15th March, photographed (P.Kelly); Immature, Wexford Harbour, 4th April, photographed (C.Cardiff, T.Cardiff); One, Churchtown, 17th October, photographed (B.McCloskey).

Wicklow Three: Second calendar-year, Broad Lough, 22nd June to 10th July, photographed (C.Cardiff); Adult, Broad Lough, 20th September to 21st November, photographed (C.Cardiff, T.Cardiff), and, presumed same, Webb's Field, Kilcoole, 9th November (C.Cardiff); Second-winter, Broad Lough, 21st October, photographed (C.Cardiff).

Bittern Botaurus stellaris (161+; 44; 2)

Kerry One: One, Lough Gill, 19th to 20th February (M.Boyle, A.McMillan *et al.*).

Wexford One: One, South Slob, 12th January (F.Tennant).

Nowadays Bittern is predominantly a rare winter visitor. Of the nineteen recorded since the new millennium only three were not during the months from October to March and these two continue that pattern. In the distant past it was a common resident, to such an extent that several place names are called after it (D'Arcy 1999). It appears that a combination of hunting and habitat destruction, especially widespread drainage of bogs and marshes, ensured its demise as a breeding species. Ussher & Warren (1900) note there is no record of the species nesting after about 1840. Hutchinson (1989) reports that although 'booming' was heard in Offaly (a few years before 1940), Clare (1945) and Wicklow (1962), there is no recent record of breeding. It has yet to feature in the report of the Irish Rare Breeding Birds Panel (annual since 2002), although one was heard booming and was sound recorded in Tacumshin Lake, Wexford early in 2011 by Killian Mullarney (Irish Birds 10: 289).

American Bittern Botaurus lentiginosus (18; 4; 1)

Cork One: Juvenile or first-winter, Castlefreke, near Owenahincha, 25th November to 14th December (L.deBeer, T.deBeer, P.Wolstenholme *et al.*), (de Beer & Wolstenholme 2016), photographs *Birdwatch* 283: 10-11 & 15 and 284: 13, *British Birds* 109: 67, *Dutch Birding* 38: 107, *Wings* 80: 28.

A prime candidate for bird of the year coming almost 26 years after the previous occurrence at Killag, Wexford in January 1990 (Irish Birds 4: 429). It was first observed on a small ornamental lake in the shadow of the 18th century Castlefreke from a moving car by Lynne de Beer. She told her husband Ted to pull over and using a telescope they had good views of it as it moved and fed around the lake and grassy bank. Lynne alerted Peter Wolstenholme who was able to join them and they were all happy it was a bittern. Peter began to phone the news to some local birders and it was suggested that American Bittern should be considered. A field guide was consulted, a definitive identification as American Bittern was reached and the news went nationwide. It remained faithful to the lake and its environs for almost three weeks and was twitched and photographed by many during its stay. This is the twenty-third record, but the first to survive the experience as all others met their demise on the day of discovery either 'shot', 'obtained', 'killed', 'found dying' or, in the case of the 1990 individual referred to earlier, 'killed by a dog'.



Plate 192. American Bittern Botaurus lentiginosus, Castlefreke, Cork, December 2015 (David Monticelli).

Night Heron *Nycticorax nycticorax* (27; 52; 1) **Cork** One: Juvenile, Slob Bank, Youghal, 8th January to 4th February, photographed (B.Rock *et al.*).

These are exceptional dates for this species as it mainly occurs as an overshooting spring migrant between March and May. Previously there was just a single January record and that was as far back as 1855. In Britain, some arriving in late autumn have over-wintered (Cottridge & Vinicombe 1996) but none have yet done so in Ireland.

Squacco Heron Ardeola ralloides (11; 8; 1)

Cork One: One, Ballycotton, 22nd May, photographed (P.Moore). Found late in the evening at Allen's Pool before flying off towards Shanagarry Marsh and not seen again. This is the first record since two in 2007 (*Irish Birds* 8: 588). South coast occurrences during May are fairly typical, with five previously and south coast counties account for fourteen of the total.

Cattle Egret Bubulcus ibis (0; 255; 1)

Wexford One: One, Tacumshin Lake, 30th October to 26th September 2016, photographed (P.Cutler, F.MacGinley, A.Power *et al.*). Numbers have returned to single figures following the heady years from 2007 to 2009 when a remarkable influx of 233 took



Plate 193. Night Heron *Nycticorax nycticorax,* Youghal, Cork, February 2015 (Jim Bowman).



Plate 194. Cattle Egret Bubulcus ibis, Tacumshin, Wexford, November 2015 (Paul & Andrea Kelly).

place across ten counties. There were no new birds in 2010, followed by four in 2011, five in 2012, eight in 2013 and five in 2014.

Great White Egret Ardea alba (0; 65; 11)

Cork Two: One, Kinsale Marsh, 20th April, photographed (R.O'Driscoll *et al.*); One, Lissagriffin, 10th October (N.Linehan).

Dublin One: Adult summer, Malahide Estuary, 17th June, photographed (M.Stewart *et al.*).

Galway One: One, Muckrush and Angliham, Lough Corrib, from 30th November 2014 (*Irish Birds* 10: 241) remained to 4th July (N.Ellis *et al.*), then, presumed same, Muckrush, Lough Corrib, 15th October to 16th December (A.O'Donaill); One, Rahasane Turlough, 4th October to 2nd November, photographed (P.Capsey *et al.*).

Kerry One: One, Baile an Reannaigh, Dingle Peninsula, 31st October to 12th November, photographed (J.Crosher *et al.*), and, presumed same, Ventry, 14th November (J.Crosher).

Kildare One: One, Crookstown, 11th January (M.Bolger, S.Bolger). **Mayo** One: Adult summer, Annagh Marsh, Cross Lough and Termoncarragh Lake, Mullet Peninsula, 7th to 11th April, photographed (M.Reilly *et al.*).

Monaghan One: Ballybay Wetlands, 7th to 11th November, photographed (D.Nesbitt *et al.*).

Waterford Two: One, Tramore Back Strand, 4th April (E.A.MacLachlainn, F.O'Connell, J.A.Power *et al.*); One, The Cunnigar, Dungarvan, 7th to 16th October, photographed (C.Flynn *et al.*). **Wexford** One: One, Tacumshin Lake, 26th April (M.Stewart).

Included here is the first for Kildare and the second for Monaghan, the latter at the same location as the first for that county in December 2009 (*Irish Birds* 10: 241).

Purple Heron Ardea purpurea (1, 23, 1)

Cork One: One, Lough Beg, Cork Harbour, 1st October 2015 (B.O'Mahony).

This is just the third October record of this secretive heron, which is primarily an overshooting spring migrant. Of the other 22, there were three in March, five in April, eight in May, four in June, one in August and one 'month not known'.

Glossy Ibis Plegadis falcinellus (103; 205; 53)

Cork Seventeen: One, Midleton, 2nd to 6th October, photographed (B.Power et al.); One, Youghal, 14th October to 2nd November, photographed (B.Rock et al.); One, Oysterhaven, 2nd November (R.O'Driscoll); Two, White's Marsh, near Clonakilty, 18th to 24th December, photographed (C.O'Sullivan et al.); One, The Gearagh, 27th December (A.Duggan); One, Blarney, 28th to 30th December (D.Lysaght et al.); Five, Barleycove, two from 28th to 30th December, joined by three others, 29th to 30th December, photographed (N.Linehan, J.Mitchell, N.Mitchell et al.); Four, Kilheangul, between Durrus and Goleen, 30th December, photographed (R.Hynes); One, Kilmichael, 31st December (A.Duggan).

Kerry Eleven: One, Carrahane Strand, 10th October (P.McDermott); At least four, Lough Naparka, Castlegregory, 14th to 25th October,



Plate 195. Glossy Ibis *Plegadis falcinellus*, Clonakilty, Cork, December 2015 (Richard T. Mills).

photographed (R.Bennett *et al.*); Six, Baile an Reannaigh, Dingle Peninsula, 19th October, and, presumed same, Ballyferriter, 20th October (S.Redican *et al.*); Two, Lough Gill, 2nd to 5th November, photographed (D.Farrar *et al.*), presumed to be two of those at Lough Naparka in October.

Meath One: One, Ashbourne, 24th November (D.Foley).

Waterford Nineteen: One, Tramore Back Strand, from 20th September 2014 (*Irish Birds* 10: 242) remained to 30th December, photographed (A.Allen *et al.*); One, Tramore Back Strand, 26th February, photographed (I.Stevenson), this in addition to the long staying individual present since 20th September 2014; Eighteen, Tramore Back Strand, 29th December, photographed (J.Roche), these in addition to the long staying individual present since 20th September 2014.

Wexford Five: One, Ferns, 18th February to 8th March (K.Grace, A.Savisky-McLaren); One, Ring Marsh, 17th to 24th October, photographed (P.Kelly); One, Tacumshin Lake, 24th to 31st October (L.Benson *et al.*); One, Tacumshin Lake, 31st October (P.Kelly), in addition to the individual found on 24th October; One, South Slob, 28th December (C.Murphy).

For the fourth year in a row, a new record is set, with twenty more than in 2014. Ever increasing records mean it is difficult to keep an accurate account of numbers involved and duplication cannot be completely ruled out. Of note, this series includes just the second record for Meath following two observed flying east at Ardcath on 5th August 2008 (*Irish Birds* 9: 87). One of the individuals at Lough Naparka, Kerry was carrying a Spanish ring.

Spoonbill Platalea leucorodia (92; 152; 10)

Cork Two: Juvenile, Rosscarbery, 16th to 19th October (T.Mullaney *et al.*), and, presumed same, White's Marsh, near Clonakilty, 17th October (R.H.Coombes, T.Culley), and, Courtmacsherry, 17th October (P.Wolstenholme), and Clonakilty, 19th October (R.T.Mills),



Plate 196. Spoonbill Platalea leucorodia, Clonakilty, Cork, October 2015 (Richard T. Mills).

photographed; One, Kinsale Marsh, 20th October (R.O'Driscoll).

Kerry One: Adult, Cromane Harbour, from 20th September 2014 (*Irish Birds* 10: 242) remained to 7th March, photographed (M.O'Clery *et al.*), then, presumed same, Cromane Harbour, 29th September to 29th December, photographed (S.Enright), presumed returning; Adult, Ballylongford, 24th July (G.Hunt).

Louth One: One, Clogher Head, 12th April (G.O'Neill).

Waterford Three: Adult and juvenile, Dungarvan, from 26th November 2014 (Irish Birds 10: 242) remained to 12th February, photographed (F.O'Connell et al.), and, presumed same juvenile, Tramore Back Strand, 28th February to 16th March (M.Cowming et al.), then, presumed same adult, The Cunnigar, Dungarvan, 16th August to 30th December, photographed (M.Cowming et al.), and presumed same juvenile, now as second-winter, Dungarvan, 23rd November to 23rd December, photographed (N.Tierney et al.), both also seen in Wexford; Three juveniles, The Cunnigar, Dungaryan, 10th October to 30th December, photographed (F.O'Connell, J.A.Power, B.Sheridan et al.). Wexford Three: Adult, Rosslare Back Strand, 13th to 19th February (J.F.Dowdall, K.Grace, K.Mullarney et al.), then, presumed same, Rosslare Back Strand, 2nd to 3rd August (D.Brannagh, N.Hatch, D.Storey-Brannagh et al.), and, Tacumshin Lake, 3rd August (P.Kelly), also seen in Waterford; Juvenile, Tacumshin Lake, 21st February (A.G.Kelly, P.Kelly, T.Shevlin) and flying west at Killag, 21st February (P.McMahaon), and, presumed same, Tacumshin Lake, 22nd March (P.Kelly), and, Our Lady's Island Lake, 23rd March (P.Kelly), and, Tacumshin Lake, 3rd April to 13th June (K.Grace, P.Kelly, I.Stevenson et al.), then, presumed same as a second-winter, Tacumshin Lake, 14th October to 15th November, photographed (P.Kelly et al.), also seen in Waterford; Two juveniles and a second-winter, Tacumshin Lake, 23rd October, photographed (P.Kelly).

For the second year in a row a bird occurred in Louth, bringing the total for that county to five. Spoonbill has been annual since 2001, including a flock of ten juveniles at Westport Quay, Mayo in October 2005 (*Irish Birds* 8: 377). Two of that group were colour-ringed at separate sites in the Netherlands. The Cromane Harbour adult was first observed in November 2005 as a juvenile (*Irish Birds* 8: 377) and has been back there every year since, as well as at Bunaclugga Bay and Blennerville (Kerry) and across the Shannon Estuary to Rineanna Point and Shannon Airport Lagoon (Clare) in 2010. Its first visit to Cromane lasted almost seventeen months from 10th November 2005 to 8th April 2007. Thereafter it reverted to spending winter months in the southwest and the rest of the year at a place or places unknown.

Northern Harrier Circus hudsonius (0; 7; 1)

Wicklow One: Juvenile, Kilcoole, Newcastle and Broad Lough, 19th November to 5th December (J.deBrito, N.T.Keogh, A.Lauder *et al.*), photograph *Birdwatch* 283: 16.

This bird ranged widely along the network of coastal wetlands in north Wicklow, echoing the only previous county record in the same area from 13th November 2010 to 27th March 2011 (*Irish Birds* 9: 292 & 458). Previously regarded as a race of Hen Harrier *Circus cyaneus*, Northern Harrier was raised to a full monotypic species in 2016

(www.irbc.ie/announcements/announce80.php). At that time there had been seven Irish records of this Nearctic raptor.

Pallid Harrier Circus macrourus (0; 5; 1)

Mayo One: Juvenile female, Annagh Marsh and Termoncarragh, Mullet Peninsula, 19th to 30th October, photographed and videoed (D.Suddaby *et al.*).

Looking through his car windscreen at about 14:00 on 19th October Dave Suddaby noticed a harrier gliding towards Annagh Marsh. He quickly ascertained it was not the juvenile Hen Harrier C. cyaneus that had previously been seen in the area, but a rather interesting juvenile 'orange' type. It eventually landed on a fence post within the marsh where Dave was able to obtain good clear views through his telescope. He noted a very striking facial pattern with a dark brown 'bat mask', relatively small white eye crescents, dark iris and black lores/eye stripe surrounded neatly and evenly by a pale collar extending from the nape to the chin, all strongly suggesting juvenile female Pallid Harrier. Anxious to eliminate the possibility of a hybrid he needed to get details of the underwing and was assisted by two Hooded Crows Corvus cornix that harassed the harrier sufficiently to make it take flight enabling Dave to capture the underwing on video. Details noted ruled out a hybrid and confirmed the identification as Pallid Harrier. This is the sixth record, with all previous records occurring during a mini-influx in 2011.

Spotted Crake Porzana porzana

(Unknown; 53; 0)

At sea Zero: One, approximately 70 nautical miles south-southeast of Old Head of Kinsale, Cork, 25th September, photographed (M.McAuliffe).

2014 Tipperary One: Calling male, near Thurles, 14th June (Observer name withheld).

The 'at sea' individual alighted on board the fishing vessel *Atlantic Rose* while it was trawling for Prawns *Nepbrops norvegicus* over the Labadie Bank in the Celtic Sea. Staff from the Marine Institute onboard were first to notice it. The bird did not appear to be under any stress and was easily caught and photographed. It was given water and breadcrumbs, allowed to rest up undisturbed before it departed the boat of its own accord later.

American Coot Fulica americana (0; 4; 0)

Kerry Zero: One, Lough Gill, from 5th November 2014 (*Irish Birds* 10: 244) remained to 5th March (D.Farrar *et al.*), photograph *Birdwatch* 274: 14.

There was a long gap of almost 30 years between the first in 1981 at Ballycotton (*Irish Birds* 2: 209) and the second in Mayo in 2010. Since then, three long-staying individuals have been present in consecutive years; at Termoncarragh Lake, Mayo in 2010 and 2011 (*Irish Birds* 9: 294 & 460), at

Ballyconneely, Galway in 2012 and 2013 (*Irish Birds* 9: 588 and 10: 80) and the Lough Gill bird in 2014 and 2015.

Crane *Grus grus* (29; 164; 4)

Kerry Four: Three, Ardfert, 7th August (G.Hunt); One, Inny Strand, Waterville, 12th to 13th October, photographed (P.McDaid). Numbers have returned to single figures following the minimflux of 2011 and 2012 (77 and twelve respectively), with four in each of the past three years.

American Golden Plover

Pluvialis dominica (1; 274; 13)

Clare Two: Two adults, 16th September, with one remaining to 23rd September, Loop Head, photographed (K.Bennet, T.Kjelsson *et al.*). Cork Five: One, Dursey Island, 17th September (A.A.K.Lancaster); Juvenile, Ballycotton, 25th September to 7th November, photographed (B.Power *et al.*); Juvenile, Rosscarbery, 14th to 19th October (P.Connaughton *et al.*); Juvenile, The Gearagh, 18th to 26th October (A.Duggan *et al.*); Adult, Rosscarbery, 31st October to 4th November (T.C.Kelly *et al.*).

Donegal One: Juvenile, Tready Hide, Inch Lough, Lough Swilly, 25th to 28th September, photographed (R.Sheppard *et al.*).

Galway One: Adult, Inishmore, Aran Islands, 3rd October, photographed (A.A.Kelly, P.Kelly).

Kerry One: Adult, Carrahane Strand, 18th September (D.A.O'Connor), and, presumed same, Black Rock Strand, 29th September (E.Carty), photograph *Wings* 79: 29.

Louth One: One, Lurgangreen, 11th to 20th October (P.Kelly, G.O'Neill *et al.*).

Mayo Two: One, Termoncarragh, Mullet Peninsula, 16th September (R.Innes, C.Jones); Adult, Keel, Achill Island, 25th to 26th September, photographed (M.O'Briain).

Temporally, these are entirely typical as those arriving in September and October number 224 or 78% of the total. Of the counties involved, six of the top seven having the biggest totals are represented here (only Wexford with 49 is missing). Cork has recorded 65, Mayo has 48, Kerry has 39, Clare has nineteen, Galway has eighteen and Donegal eleven with Louth some way behind with five. The only slight anomaly is that thirteen is short of the annual average of just over sixteen recorded since 2000.

The IRBC recently published a review of 20th century records of Lesser Golden Plover *P.d. dominica/fulva* (Hussey 2015).



Plate 197. American Golden Plover Pluvialis dominica, Achill Island, Mayo, September 2015 (Micheal O'Briain).

Dotterel Charadrius morinellus (146; 162; 18)

Clare One: Juvenile, Fodry, Loop Head, 23rd to 24th September, photographed (J.N.Murphy, G.Pearson).

Cork One: Juvenile, Ballycotton, 11th October, photographed (R.McLaughlin *et al.*).

Galway Ten: Up to eight adult summer, Aillebrack and Truska, Slyne Head, 23rd to 29th April, photographed (D.Breen, A.O'Donaill, R.Vaughan *et al.*); Two juveniles, Truska, Slyne Head, 18th to 21st September, photographed (D.Breen).

Waterford Two: Two, off Ram Head, 15th September (F.O'Connell). **Wexford** One: Juvenile, Tacumshin Lake, 20th to 26th September, photographed (N.Keogh, N.T.Keogh *et al.*).

Wicklow Three: Three juveniles, Lugnaquilla Mountain, 6th September, photographed (H.Lawless).

2014 Waterford One: One, Brownstown Head, 11th September (D.Weldon).

Spring and autumn passage normally involves single birds or occasionally small groups of four or fewer, with just six exceptions of spring trips numbering between eighteen and 30; making the eight at Slyne Head notable but not record breaking. It is not unusual for spring migrants to turn up in suitable nesting habitat, but to date the only instance of breeding was at Nephin More, Mayo in 1975 (*IBR* 23: 13).



Plate 198. Dotterel *Charadrius morinellus*, Slyne Head, Galway, April 2015 (Dermot Breen).

Little Ringed Plover Charadrius dubius (0; 138; 10)

Tipperary One: One, Ashton's Callow, 22nd May (P.Brennan). **Waterford** One: Juvenile, Lisselan, Tramore Back Strand, 15th to 21st August, photographed (M.Cowming *et al.*).

Wexford Four: Adult summer, Tacumshin Lake, 6th April (P.Kelly);

One, The Cut at Our Lady's Island Lake, 20th April (K.Fahy); Adult, Tacumshin Lake, 11th July, photographed (P.Kelly); Juvenile, Our Lady's Island Lake, 30th August (P.Kelly).

Wicklow Four: Female and three males, Poulaphouca, spring (per IRBBP).

The average since the turn of the century of just over seven is exceeded. Of the four in Wicklow, a pair produced eggs, but the nest was flooded following heavy rain and did not survive (Newton 2015). Breeding was first confirmed to have taken place in a Tipperary gravel pit in 2008 (Collins 2008) followed in 2010 and 2011 at unspecified locations in Leinster (Hillis 2011 & 2012). In addition, breeding was suspected to have taken place in 2004 and 2007 on the basis of fledged young seen in the company of adults (Perry 2013). It is far from certain whether these few breeding and possible breeding records give rise to the prospect of future colonisation by this summer migrant.

Hudsonian Godwit

Limosa haemastica (0; 0; 1)

Galway One: Adult male, Inishdawros, Ballyconnelly, 22nd July (D.Breen), (Breen 2015), then, presumed same, Kilmurvey, Inishmore, Aran Islands, 15th to 17th September (A.Lees, S.Mahood, R.Moores *et al.*), (Punkbirder team 2015), photographs *Birdwatch* 279: 9 and 281: 12, *Dutch Birding* 37: 341, *Wings* 79: 28.

Historically, Inishdawros had not proven an especially productive wader site for Dermot Breen, with a Curlew Sandpiper Calidris ferruginea in 2014 his previous best. However, a chance drop-in on his way to Ballyconnelly during the afternoon of 22nd July would change that considerably. Taking his camera he headed towards an area where some terns had been feeding, but his attention was soon distracted by a godwit that flew from his left, banking twice, then passing as close as 30 metres before landing out of sight behind a large rock. Despite these brief views Dermot managed to note (with the naked eye) a combination of black underwing coverts, clean white rump, black tail and rusty underparts. Incredibly, it could only be a Hudsonian Godwit, a first for Ireland! Hoping it was still around he cautiously peeped over the rock, dangerously spooking some Redshank Tringa totanus and Greenshank *T. nebularia* in the process, before experiencing the huge relief of relocating the bird standing at the water's edge. Over the next hour or so, this beautiful wader was on show often enough to allow Dermot take a series of pictures, both on the deck and in flight. Unfortunately, the distances involved in getting to west Galway meant that no other birders managed to arrive before the bird was last seen around 17:25. That really should have been the end of it.

Almost two months later, the 'Punkbirder' team of Dan Brown, Simon Mahood, Rob Martin, Rich Moores, Alex Lees, James Gilroy, Rich Addison, Jez Bird and Dave Smith were in Ireland for a 'stag-do' and some birding. They spent time around Galway City before heading to Inishmore, where, on



Plate 199. Hudsonian Godwit Limosa haemastica, Inishmore, Galway, September 2015 (David Monticelli).

arrival, they encountered 36 hours of more-or-less continuous rain. When it finally cleared on the morning of their last day they headed out, anxious to make up for lost time. From sand dunes near Kilmurvey, Simon Mahood noticed a wader in the distance that was soon realised to be a godwit. They moved closer until Rich Moores announced that it looked like a 'Hudwit'! Panic ensued, exacerbated by the fact that no one had brought a telescope and moving closer for better views could easily scare off the bird. An anxious hour passed until the rest of the team arrived bringing telescopes thereby allowing identification as a Hudsonian Godwit to be confirmed.

Since its brief appearance in Inishdawros in July it had begun to moult, but on balance it was concluded that it was the same individual. We will probably never know where it frequented during those intervening weeks, but the west Galway area is most likely. The bird remained for two further days allowing many that dipped its first appearance to catch up.

Hudsonian Godwit breeds in disjunct locations on arctic tundra from Alaska east through Canada to the southern shore of Hudson Bay and is a long-distance migrant wintering on pampas marshes and coastal mud flats in South America (mainly in Argentina). It is an extremely rare vagrant in the

Western Palearctic with just six previous occurrences. There are three British records; the first for Britain and the Western Palearctic was an adult at Blacktoft Sands, Humberside on 10th September 1981 (Grieve 1987) that returned to Devon in 1982 and again to Blacktoft Sands in 1983, the second was near Collieston, Grampian on 26th September 1988 and the most recent was at Meare Heath, Somerset in May 2015. Elsewhere in the Western Palearctic there are single records in Denmark (1986), Sweden (2003), Azores (2007) and Norway (2008).

Baird's Sandpiper *Calidris bairdii* (0; 149; 0) **2014 Mayo** Zero: Juvenile, Cross Lough, Mullet Peninsula, 26th to 27th September (*Irish Birds* 10: 246) – Correction: location should read Cross Lough, Killadoon.

White-rumped Sandpiper

Calidris fuscicollis (0; 327; 7)

Cork Three: One, The Gearagh, 1st October (A.Duggan); Two juveniles, Ballycotton, 7th to 8th November, photographed (D.Fitzpatrick, G.Gordon *et al.*).

Dublin One: Adult, North Bull Island, 20th August, photographed (T.Cooney, P.McMahon).

Kerry Two: One, Blennerville, 18th October (E.Carty). Juvenile, Carrahane Strand, 22nd October, photographed (M.O'Clery).



Plate 200. White-rumped Sandpiper *Calidris fuscicollis*, Tacumshin Lake, Wexford, July 2015 (Tom Shevlin).

Wexford One: Adult summer, Tacumshin Lake, 19th to 21st July (P.Kelly *et al.*), photograph *Birdwatch* 279: 18.

White-rumped Sandpiper has become a regular and welcome vagrant to Ireland since the first in 1956, only failing to appear in three subsequent years (1962, 1963 & 1972). In addition to occurring in most coastal counties it has also turned up inland at Derrytrasna, Lough Neagh, Armagh on 24th October 2006 (*Irish Birds* 8: 594) and at Lough Boora Parklands, Offaly in September 2011 (*Irish Birds* 9: 466).

Semipalmated Sandpiper

Calidris pusilla (0; 193; 2)

Kerry Two: Juvenile, Inny Strand, Waterville, 19th August, photographed (P.McDaid); Juvenile, Inny Strand, Waterville, 28th September to 1st October (M.O'Clery *et al.*).

After the blank year of 2014 (the first since 1994), two juveniles occurred in Kerry on typical dates. This little gem tends to turn up in single figures following periods of westerly gales in autumn; although there have been a few bumper years, most notably in 2011 when 63 were recorded. The months of August, September and October account for 182 of the 195 records or just over 93%. Of those, 170 individuals were aged as 140 juveniles and 30 adults. There is a good spread of counties involved with Kerry (47), Wexford (41) and Cork (38) the main contenders, followed by Mayo (seventeen), Dublin (eight), Clare and Donegal (six each), Down and Galway (five each), Waterford (four), Londonderry (two) and Louth, Sligo and Wicklow (one each). In addition to autumn records there are three in April (the earliest ever was at Belfast Harbour on 9th), one in June, eight in July (all adults) and a single November record at Ballycotton on the 21st. This Calidrine breeds from western Alaska across Arctic Canada to the Atlantic. It seems likely that birds arriving on these shores in autumn originate from the eastern Canadian population as they undertake a transoceanic migration route to Caribbean and South American wintering grounds, thus making them vulnerable to eastward displacement by fast moving North Atlantic depressions (Paulson 2005). A migrating bird that was fitted with a geolocator on Coats Island, Nunavut, Canada in June 2013, undertook a six day non-stop flight from James Bay, Nunavut directly to the Orinocco River Delta, Venezuela, a journey that was mostly over the Atlantic Ocean.

Red-necked Phalarope

Phalaropus lobatus (3; 46; 3)

Donegal Two: Two, off Rossan Point, 18th July (S.Pierce).

Wicklow One: Adult female, Broad Lough, 7th June, photographed (C.Cardiff, T.Cardiff *et al.*).

The two off Rossan Point were observed flying south during a seawatch. Since 2013 these reports only publish records of non-breeding birds (*Irish Birds* 10: 84).

Spotted Sandpiper *Actitis macularius*

(1; 44; 1)

Cork One: First-winter, Pilmore, near Youghal, 22nd November remaining to 23rd February 2016, photographed (K.Kelly *et al.*). This is the second to over-winter and there are just four later arrivals. During its stay it often proved very confiding and remained largely faithful to the beach area in the vicinity of St. Ita's GAA pitch at Pilmore. This Nearctic wader more usually arrives as an autumn vagrant with over half of all records occurring during September and October (28, or 61%).

Lesser Yellowlegs Tringa flavipes (0; 152; 2)

Cork Two: One, Skibbereen, 4th February (J.Wyllie); Juvenile, Clogheen Marsh, Clonakilty, 30th September to 15th October, photographed (C.O'Sullivan *et al.*).

Dublin Zero: Juvenile, Rogerstown Estuary, from 1st October 2014 (*Irish Birds* 10: 247) remained to 14th April, photographed (R.Vaughan *et al.*).

Although birds have been recorded in winter months, the Rogerstown bird is just the sixth to have over-wintered, with four of the previous five in Cork and the other at Dundalk Docks, Louth. The first Lesser Yellowlegs (hereafter Lesser) for Ireland was at Our Lady's Island Lake in 1955 (*IBR* 1: 15) and the first Greater Yellowlegs (hereafter Greater) *T. melanoleuca* was near Skibereen in 1940 (Kennedy *et al.* 1954). Despite the fifteen year head-start, numbers of Lesser soon overtook Greater. By the end of 1965 there were eight Lesser compared to six Greater, by the end of 1970 it was 23 to seven in favour of Lesser and by 1975 it was 32 to eight. Since then the gap has continued to grow to the point that the current tally is 154 Lesser and thirteen Greater. On the



Plate 201. Spotted Sandpiper *Actitis macularius*, Pilmore, Cork, December 2015 (Rachel Hynes).

face of it, this does not seem plausible as Greater is the more easterly breeder of the two. A possible explanation is the amount of fat reserves each accumulates prior to migration, which suggest Greater is less capable of achieving non-stop Atlantic crossings. Studies in the Gulf of St. Lawrence found adult Greaters with low fat deposits sufficient for average flights of 860 miles, with the heaviest managing between 1,650 and 1,800 miles (Cramp & Simmons 1983). Similar studies with Lessers discovered some with moderate deposits sufficient for average flights of 1,300 miles and some heavier adults capable of flights between 1,865 and 2,110 miles (Cramp & Simmons 1983). Cottridge & Vinicombe (1996) suggest that those Greaters reaching these shores are exceptionally heavy individuals or have arrived by a different route.

Long-billed Dowitcher

Limnodromus scolopaceus (2; 122; 6)

Cork One: One, The Gearagh, 29th September (A.Duggan). **Dublin** One: Juvenile, Rogerstown Estuary, 8th to 10th November, photographed (A.G.Kelly *et al.*).

Kerry One: One, Killorglin, 11th November (R.Moores, M.Owen).



Plate 202. Long-billed Dowitcher *Limnodromus scolopaceus*, with Redshank *Tringa totanus*, The Cull, Wexford, June 2015 (Killian Mullarney).

Wexford Three: One, Tacumshin Lake, 2nd January (P.Kelly); Adult summer, Seafield, The Cull, 12th and 28th June, photographed (K.Grace, M.Maddock *et al.*); Juvenile, Tacumshin Lake, 22nd to 26th September (J.M.Murphy), and, presumed same, Rosslare Back Strand, 25th September, photographed (P.Kelly).

More than half of all records have occurred since the year 2000 (69 or 53%) and Wexford (with 30) and Cork (with 27) are the counties with the most records.

Gull-billed Tern

Gelochelidon nilotica (0; 19; 1)

Kerry One: Adult, Blennerville and environs, 17th October to 27th November (M.Hanafin *et al.*), and, presumed same, Rough Point, near Castlegregory, 28th October (M.O'Clery), photographs *Birdwatch* 283: 16. *Wings* 80: 29.

Found by Maurice Hanafin east of Annagh Island, Tralee Bay. Apart from an excursion further out the bay to Rough Point, the bird remained faithful to the general area of Blennerville for almost seven weeks, by far the longest ever stay for a Gull-billed Tern. It also sets records for latest arrival and departure dates as previously they stood at 5th and 10th October respectively.



Plate 203. Gull-billed Tern Gelochelidon nilotica, Blennerville, Kerry, November 2015 (David O'Connor).



Plate 204. Elegant Tern *Sterna elegans,* with Sandwich Terns *S. sandvicensis*, Beale Strand, Kerry, September 2013 (David O'Connor).

White-winged Black Tern

Chlidonias leucopterus (9; 94; 1)

Dublin One: Juvenile, North Bull Island and Dublin Bay, 23rd August (A.G.Kelly).

An influx of about 70 Black Terns *C. niger* to Dublin Bay were gathered between Sandymount Strand and North Bull Island. At 20:00 Aidan G. Kelly noticed a juvenile White-winged Black Tern in a group of eight Black Terns flying just offshore of Dollymount Strand, North Bull Island. It landed on rocks below the *Realt na Mara* statue on the North Bull Wall, where Aidan was able to view it in his telescope. More Black Terns joined it on the rocks until they numbered about twenty. Just before dusk, the whole flock got up and flew south across the bay towards Sandymount.

Elegant Tern Sterna elegans (0; 6; 0)

2013 Kerry One: Adult, Beale Strand, 13th to 24th September (D.Farrar *et al.*), (Farrar 2013), photographs *Birdwatch* 257: 61, *Wings* 71: 26.

A great find by Davey Farrar of the second county record, following one at Dingle Harbour in October 2002 (*Irish Birds* 7: 403). The first Irish and second Western Palearctic record was at Carlingford Lough, Down, and, presumed same individual, at Ballymacoda, Cork during the summer of 1982 (*Irish Birds* 3: 632). The other records comprise an adult at Our Lady's Island Lake, Wexford in July 1999 (*Irish Birds* 6: 562), a third calendar-year at Mulranny, Mayo in October 2001 (*Irish Birds* 7: 231 and 8: 387) and a second-summer or adult at Gormanstown, Meath in July 2005 (*Irish Birds* 8: 387).

Some time has been spent assessing this 2013 record due to the need to eliminate the possibility of a Sandwich S. sandvicensis or Lesser Crested Tern S. bengalensis first generation hybrid or backcross. This process has been greatly assisted by the recent publication of Dufour et al. (2016), which, among other findings, has confirmed through DNA sequencing that genetically pure Elegant Terns are occurring in western Europe.

Forster's Tern Sterna forsteri (0; 39; 0)

Clare Zero: Adult winter, New Quay, 29th November (P.Troake), also seen in Galway.

Dublin Zero: Adult winter, Rush and Rogerstown Estuary, 6th to 27th September (A.G.Kelly *et al.*), photograph *Dutch Birding* 37: 343, also seen in Louth.

Galway Zero: Adult winter, Galway Bay, from 23rd November 2014 (*Irish Birds* 10: 248) remained to 5th June, when also at Fiddaun Island, photographed (C.Peppiatt *et al.*), then, presumed same, Nimmo's Pier, 24th October to 27th December, photographed (G.Hunt), presumed returning, also seen in Clare.

Louth Zero: Adult winter, Soldier's Point, 22nd to 26th August (E.Larresey *et al.*), photograph *Birdwatch* 280: 16, presumed returning, also seen in Dublin.



Plate 205. Forster's Tern *Sterna forsteri*, Rush, Dublin, September 2015 (Aidan G. Kelly).

It is not unusual for this Nearctic tern to be observed at the same locations over successive years, when it is often presumed to be returning, as both these are. The Dublin and Louth individual was first recorded in 2006 (*Irish Birds* 8: 404) and apart from 2010 has returned every year. The Galway and Clare individual has an even longer history of returning. It was first recorded in 2004 (*Irish Birds* 8: 117) and has been present every year since.

Bonaparte's Gull

Chroicocephalus philadelphia (1; 75; 1)

Waterford One: First-winter, Tramore, 15th March to 7th April, photographed (A.Jacques *et al.*).

The first Irish and Western Palearctic record was an adult in winter plumage, shot on the River Lagan, near Belfast on 1st February 1848 (Thompson 1851). Over 130 years would elapse before another arrived on our shores when one frequented Bangor Harbour, Down intermittently from July 1979 to February 1980 (*Irish Birds* 1: 572). Thereafter, numbers changed dramatically with eight in the 1980s, twelve in the 1990s, 39 in the 2000s and so far this decade there have been sixteen. This is the fifth Waterford record and the second at Tramore following an adult there in November 2014 (*Irish Birds* 10: 248).

Laughing Gull Larus atricilla (0; 43; 0)

Cork Zero: Second calendar-year, Ballycotton, from 27th June 2014 (*Irish Birds* 10: 249) remained to 30th April, by which time it was moulting to second-summer plumage (D.O'Sullivan *et al.*), photograph *Birdwatch* 274: 16.

Although this bird wandered throughout Ballycotton Bay it was most often found at the harbour pier, where it was originally discovered. Some photographers realised it could occasionally be tempted to fly closer by throwing it titbits and were rewarded with some excellent images. It was generally observed on its own and as it came to the end of its protracted stay, it gradually became more and more elusive.

Franklin's Gull Larus pipixcan (0; 17; 1)

Galway One: Adult summer, Rusheen Bay, 13th June (M.Davis). This gull was seen briefly on the large tidal back strand at Rusheen Bay before it was observed flying off to the northeast in the direction of Lough Corrib.

Atlantic Gull Larus michahellis atlantis (0; 14; 1)

Cork One: Adult, River Lee at Blackrock Castle, 8th to 27th September, photographed (B.Power *et al.*).

This is a bird showing characters of the Atlantic island form, in particular, the somewhat more distinctive Azorean population.

American Herring Gull

Larus smithsonianus (0; 96; 1)

Cork One: First-winter, Black Ball Harbour, West Beara, 15th March to 19th April (F.Moore), photograph *Birdwatch* 275: 15.

Cork City and county account for just over one-third of all records of this Nearctic gull with 34 (or 35% of the total). The city, Cobh and eastern parts of the county, where 24 have occurred, tend to do better than west Cork and this is only the second for the Beara Peninsula – the previous record was at Castletownbere on 8th March 2009 (Irish Birds 9: 267). The first Irish and second Western Palearctic record was a firstwinter found by Jim Wilson at Cobh on 16th November 1986 (Irish Birds 4: 246, www.irbc.ie/notes/ahg/ahg.php). At that time and until 2004 it was treated as a race of Herring Gull L. argentatus by the IRBC. The second record did not occur until February 1990 and between then and the end of the decade there were 37; with annual totals of ten (1990), two (1991), two (1992), zero (1993-1995), four (1996), three (1997), seven (1998) and nine (1999). The decade following the new millennium was even more productive with an overall total of 50; with annual figures of five (2000), three (2001), five (2002), nine (2003), twelve (2004), five (2005), one (2006), five (2007), three (2008) and two (2009). Since then numbers have dwindled with just one in 2010, 2011, 2012, 2013 and again this year; 2014 was the exception with four. In Britain, where it is much rarer (30 to 2015 since the first in 1994), there were records every year from 2002 to 2009, then it was absent for the next four, followed by singles in 2014 and 2015 (BBRC reports). This decline, here and in Britain, is something of a puzzle. The North American population does not appear to be a factor as BirdLife International (2016) report a 'small or statistically insignificant decrease over the last 40 years' and birders' appreciation of its identification appears to be well developed drawing on their own field experiences and referencing a variety of identification articles, e.g. Adriaens & Mactavish (2004), Dubois (1997) and Lonergan & Mullarney (2004).

Slaty-backed Gull *Larus schistisagus* (0; 1; 1) **Donegal** One: Adult winter, Killybegs, 17th to 18th January (M.Callaghan, D.Charles *et al.*), (Charles 2015), photographs *Birdwatch*

273: 8-9, Wings 77: 27.

A second Irish record hot on the heels of the first in Galway during February 2013 (*Irish Birds* 10: 250). This great find was just reward for Donegal regulars Derek Charles and Majella Callaghan, who took a chance that a series of early January northwesterly storms would carry northern gulls to the fishing port of Killybegs. Slaty-backed Gull has been recorded as a vagrant on the east coast of North America (Sibley 2014), so it is not inconceivable this Eastern Palearctic gull arrived from the west rather than the east. Fortunately it remained closeby long enough to allow confirmation of the salient features, including the outer five primaries 'string of pearls', white trailing edge to the secondaries, bubble-gum pink legs and dark mantle.

Kumlien's Gull Larus glaucoides kumlieni (0; 297; 11)

Cork Three: Adult-winter, Baltimore, 6th to 7th April, photographed (M.Ameels); Second-winter, Mizen Head, 9th August to 12th October, photographed (K.Mullarney, B.J.Pinchen *et al.*); Second-winter, Owenahincha, 27th November, photographed (D.Charles, P.Moore *et al.*).

Donegal Seven: Second-winter, Greencastle, from 31st December 2014 (*Irish Birds* 10: 250) remained to 2nd January (R.McLaughlin); First-winter, Ballyliffin, Malin Head, 22nd January (R.McLaughlin); First-winter, Killybegs, 7th February (M.Boyle, A.McMillan); First-winter, Fanad Head, 28th February to 1st March (W.Farrelly); Second-winter, Fanad Head, 1st March (W.Farrelly); First-winter, Malin Head, 11th to 13th March (R.McLaughlin); First-summer, West Town Harbour, Tory Island, 6th to 7th June (J.Adamson); Fourth-winter, Killybegs, 22nd November, photographed (M.Callaghan, D.Charles *et al.*).

Kerry One: Juvenile, Cashen Estuary, 30th November, photographed (D.Farrar).

The average since the new millennium is just over seventeen, but that figure is skewed by the incredible record total of 84 in 2014 and the very poor return of none in 2001. When both these extremes are discounted the average is just under thirteen, much more in sync with this year's figure. Cork, Donegal and Kerry account for 188 (or 61%) of the overall total. Donegal has the most with 92, followed by Cork with 44 and Kerry with 42. The Tory Island bird is the first in June and the Mizen Head bird the first in August leaving May and July as the only months without a record.



Plate 206. Atlantic Gull Larus michahellis atlantis, Blackrock Castle, Cork, September 2015 (John Coveney).



Plate 207. Slaty-blacked Gull Larus schistisagus, Killybegs, Donegal, January 2015 (Derek Charles).

Scops Owl *Otus scops* (10; 5; 1)

Wexford One: One, Great Saltee Island, 11th April (K.Grace *et al.*), photograph *Birdwatch* 276: 16.

After a couple of hours birding on Great Saltee Island, Kieran Grace made his way towards the main garden where a Wryneck *Jynx torquilla* had been reported. As the Wryneck was avoiding detection and conscious that the boat off the island was imminent, Kieran decided to check the perimeter of the garden one last time. Just as he was about to complete his circuit, a bird, which he immediately realised was a small owl, flew from low down on his right hand side. He shouted a warning to those present; panic quickly ensued as birders ran towards the main house where it had flown and it was eventually relocated perched in a tree beside the main garden. At this point, most got good views and Tom Shevlin managed to get some superb photographs of the bird before it took off, never to be seen again despite much searching.

This is the sixteenth record but only the sixth since a calling bird was sound recorded on 18th June 1974 at Lisnarick, Fermanagh (*Irish Birds* 1: 88). Of the other four; one was found freshly dead on Brownstown Head, Waterford (1998), two were found injured (neither survived) at Inchydoney, Cork (1993) and at Crookhaven, Cork (2005), and one was in Cotter's Garden, Cape Clear Island, Cork (1999) where it was trapped. Despite two November records over a century apart (1883 and 2005), the pattern of occurrences strongly suggest it is an overshooting spring migrant, with four in April, five in May, one in June and two in July.

Snowy Owl Bubo scandiacus (55; 26; 2)

Clare One: Female or immature, Gleninagh Mountains and Cappanawalla Hill, near Ballyvaughan, 6th to 20th April, photographed (J.N.Murphy *et al.*).



Plate 208. Scops Owl *Otus scops*, Great Saltee Island, Wexford, April 2015 (Tom Shevlin).

Donegal Zero: One, Arranmore Island, 19th July (S.Bonner), presumed returning.

Mayo One: Adult male, Tarmon Hill, Mullet Peninsula, 26th April, photographed (D.Suddaby).

Hearing news that Dotterels *Charadrius morinellus* had been observed in Galway, Dave Suddaby set out for a walk around Tarmon Hill with that species in mind. Around 16:00 he was scanning a likely area when he noticed a white rock about 300 metres off. As he approached the rock it suddenly became alert and took flight before landing on a fencepost a short distance off — it was an adult male Snowy Owl! The bird then made another short flight to some rocks close to the road where it settled and remained until 19:00, when it was last seen.

Alpine Swift Apus melba (7; 71; 1)

Mayo One: One, Aughleam, Mullet Peninsula, 12th May (D.Suddaby). Around noon on 12th May, Dave Suddaby was in the BirdWatch Ireland office in Aughleam. Through the window he noticed what looked like a swift flying outside and on further investigation realised it was an Alpine Swift. Over the following twenty minutes, he was able to get excellent views until it made off southwards towards Blacksod Point, then gaining height and continuing towards Achill Island.

Bee-eater Merops apiaster (21; 41; 2)

Galway One: One, Errisbeg, 25th May (S.Baker).

Mayo One: One, Tarmon and environs, Mullet Peninsula, 14th to 20th May, photographed (D.Suddaby *et al.*).

Sprained knee ligaments kept Dave Suddaby house-bound for a period from 13th May. The following morning at about 09:00 he was sitting in his kitchen feeling disgruntled and down on his luck, which was about to change. As he looked through his rain splattered window a Bee-eater suddenly appeared on



Plate 209. Bee-eater *Merops apiaster*, Mullet Peninsula, Mayo, May 2015 (Séamus Feeney).

over-head wires just outside. Unable to get up and head out, he did at least manage to grab a record shot before the bird flew off. Two days later, he saw it again through the same window, but once again was unable to follow. However, over the following four days visiting birders were able to keep track of its movements around Tarmon until it was last seen on 20th May. The bird at Errisbeg was observed at 17:30 flying east just south of the R341 along the coast, before turning and heading northeast towards Roundstone.

Wryneck Jynx torquilla (9; 309; 15)

Clare One: One, Shannon Airport, 30th September, photographed (S.Mahon).

Cork Eight: Two, Mizen Head, 9th April (P.Connaughton et al.); One, Dursey Island, 10th April, photographed (F.Moore); One, Ballinglanna, 12th April (C.Barton); One, Toe Head, 22nd August (J.Earley); One, Mizen Head, 10th to 12th September (C.Foley, D.Foley et al.); One, Knockadoon Head, 13th to 21st September (D.O'Sullivan et al.); One, Mizen Head, 11th October (W.Farrelly).



Plate 210. Wryneck *Jynx torquilla,* Fethard-on-Sea, Wexford, September 2015 (Liam Ryan).

Galway One: One, Inishmore, Aran Islands, 5th October, photographed (H.Delaney, A.A.Kelly, P.Kelly).

Mayo One: One, Blacksod, Mullet Peninsula, 1st September (D.Suddaby).

Wexford Four: One, Great Saltee Island, 10th to 11th April (M.Boyle, A.A.Kelly, P.Kelly *et al.*); One, Great Saltee Island, 17th to 18th April (K.Grace, T.Murray, A.Walsh *et al.*); One, Great Saltee Island, 29th August, photographed (L.Benson, M.Boyle, A.McMillan *et al.*); One, Fethard-on-Sea, 15th to 22nd September, photographed (L.Ryan *et al.*). Six in spring and nine in autumn does not reflect the usual seasonal division of records, which is heavily biased towards autumn passage. Of the 333 to date, only 29 have been in spring (seventeen in April and twelve in May) with the remainder in autumn (21 in August, 187 in September, 91 in October and five in November). This year's records include the fourth for both Clare and Mayo and the fifth for Galway.

Red-footed Falcon

Falco vespertinus (1; 31; 1)

Waterford One: First-summer male, Kilmurrin Cove, 5th June (F.O'Connell, J.A.Power, B.Sheridan).

This is the second for Waterford following a female at Helvick Head on 5th May 1994 (Irish Birds 5: 335). Red-footed Falcon is a very long-distant migrant with the core population breeding from eastern Europe east to north-central Asia and wintering in southern parts of Africa. Spring migration follows a predominantly westerly route taking many north across western and central parts of the Mediterranean (Ferguson-Lees & Christie 2001). It would appear that those arriving on our shores are part of this movement that are getting caught up in anticyclonic systems centred over Europe. Of the 32 previous records, eighteen have been in May and the Waterford bird is the fifth for June. Most records are of single birds, however three (two first-summer male and a firstsummer female) were at Tacumshin Lake, Wexford in late May 2010 (Irish Birds 9: 292) and five (three males and two females) were at Ballyconneely, Galway on 28th and 29th April 1992 (Irish Birds 5: 88).

Hobby *Falco subbuteo* (14; 329; 19)

Carlow Two: One, Mount Leinster, 11th June (T.Moore); One, Kilbrannish, 8th August, photographed (F.Willis *et al.*).

Clare Two: One, Caherhurly, 9th June (P.Troake); Adult, Kilbaha, 3rd to 9th October (J.N.Murphy *et al.*).

Cork Four: One, Ballyvergan Marsh, 24th May (R.McLaughlin); Adult, The Gearagh, 29th September (A.Duggan); One, Dursey Island, 5th October (K.Grace); One, Mizen Head, 24th October (S.Pierce).

Dublin One: Probably an adult, Turvey Parklands, Rogerstown Estuary, 28th June (E.Quinn).

Galway One: First-summer, Inishbofin, 28th to 29th June, when found dead, photographed (J.Jefferson).

Waterford One: First-summer, Carrigavantry, 4th to 11th June, photographed (A.Jacques *et al.*).

Wexford Six: First-summer, Cahore Marsh, 21st May, photographed



Plate 211. Juvenile Hobby *Falco subbuteo*, Tacumshin Lake, Wexford, October 2015 (Richard H. Coombes).



Plate 212. Woodchat Shrike *Lanius senator*, Ballycotton, Cork, May 2015 (Rachel Hynes).

(M.Stewart); One, Oldtown, Tomhaggard, 22nd May, observed at 17:50 flying east towards Tacumshin Lake (K.Grace), where it was observed at 18:15 (P.Kelly); Two, Tacumshin Lake, 23rd May (P.Kelly), presumed to include the Tomhaggard / Tacumshin Lake individual of 22nd May; One, Our Lady's Island Lake, 24th May, photographed (P.Kelly), presumed to be one of those at Tacumshin Lake on 23rd May; Juvenile, Tacumshin Lake, 5th September (P.Kelly); Juvenile, Tacumshin Lake, 5th September (P.Kelly); Juvenile, Tacumshin Lake, 30th September to 2nd October, photographed (C.Foley, D.Foley et al.); Juvenile, Hook Head, 6th to 7th October (B.Haslam, St.Prouse, Su.Prouse et al.).

Wicklow Two: First-summer, Five-Mile-Point, 21st to 25th May, photographed (C.Cardiff *et al.*); First-summer, Five-Mile-Point, 24th May, photographed (C.Cardiff, T.Cardiff), in addition to the individual found on 21st May.

With just one previous Carlow record at Leighlinbridge on 22nd May 2009 (*Irish Birds* 9: 260), two in that southeastern county is notable.

Gyr Falcon Falco rusticolus (87; 39; 2)

Galway One: Juvenile white morph, Inishbofin, 5th February and 7th April, photographed (E.McGloin *et al.*).

Mayo One: Juvenile, Inishkea South, 4th February to 17th March, photographed (D.Cabot, A.Walsh).

Gyr Falcon occurs mainly in western counties during winter and spring and these two reflect that trend.

Golden Oriole Oriolus oriolus (62: 154: 2)

Cork One: Female, Cotter's Garden, Cape Clear Island, 18th May (S.Wing).

Wexford One: Male, Ballyhiho, Tacumshane Village, 24th to 25th April (K.Fahy *et al.*).

Golden Oriole is a classic overshooting spring migrant, almost unheard of in autumn. The earliest that can be dated precisely is 15th April, but the main arrival happens in May, which accounts for 133 (or 42%) of the total.

Red-backed Shrike Lanius collurio (7; 176; 6)

Cork Five: Adult male, Dursey Island, 10th June, photographed (D.O'Sullivan, M.Stewart *et al.*); First-winter, Mizen Head, 9th September (D.Ballard *et al.*); First-winter, Old Head of Kinsale, 16th to 17th September, photographed (R.O'Driscoll *et al.*); First-winter, Mizen Head, 22nd to 25th September (D.Ballard, C.O'Sullivan *et al.*); First-winter, Mizen Head, 11th to 22nd October (D.Ballard *et al.*).

Waterford One: First-winter, Brownstown Head, 12th to 16th September, photographed (M.Cowming *et al.*).

Included here is the second record at Brownstown Head, thus making it the third for Waterford and the Dursey Island bird is only the fifth in June.

Woodchat Shrike Lanius senator (2; 98; 4)

Cork Three: Male, Coosadouglas, Cape Clear Island, 13th April (S.Wing); Adult male, Ardnahinch, 5th May (A.Jeffery), and, presumed same, Ballynamona and Ballycotton, 6th to 13th May, photographed (M.Cowming, N.Hatch, R.Hynes *et al.*); Juvenile, Garinish, West Beara, 29th September (A.A.K.Lancaster).

Wexford One: Adult, Great Saltee Island, 17th to 19th April, photographed (T.Murray *et al.*).

This shrike is predominantly an overshooting spring migrant with a secondary peak in autumn, mainly of wandering juveniles, which is reflected in these records. The statistics exclude both occurrences of the Balearic form *L.s. hadius*.

Bearded Tit Panurus biarmicus (0; 123; 4)

Wexford Four: The group of up to 30 at Tacumshin Lake from 3rd July 2011 (*Irish Birds* 9: 478, 598; 10: 93, 252) remained to 1st November, photographed (K.Grace *et al.*); The group of up to 22 at Ring Marsh from 19th February 2012 (*Irish Birds* 9: 598 and 10: 93 & 252) remained to 4th April, photographed (P.Kelly *et al.*); The group of up to six, including males and females at Cahore Marsh from 16th November 2014 (*Irish Birds* 10: 253) remained to 8th February, photographed (T.Kilbane *et al.*); Three males and a female, The Cull, 13th October, photographed (P.Kelly).

The Wexford enclave continues to maintain its foothold. Evidence of recent breeding at Tacumshin Lake includes two females carrying nesting material on 25th May 2014, a male and a fledged juvenile on 2nd June 2014 and a pair carrying food on 2nd June 2015 (Newton 2015).

Short-toed Lark

Calandrella brachydactyla (1; 77; 1)

Wexford One: One, Tacumshin Lake, 25th September (P.Kelly). Although Short-toed Lark has occurred in all months from April to October there are clear peaks during periods of spring and autumn migration. Spring arrivals are concentrated during May (twenty) and autumn arrivals concentrated in October (twenty nine) and to a lesser extent in September (seventeen). This is the twenty-ninth record for Wexford and the sixth for Tacumshin Lake including one that was observed while in full song-flight in 2006 (*Irish Birds* 8: 407).

Red-rumped Swallow Cecropis daurica (0; 50; 3)

Cork Two: One, Mizen Head, 9th April (M.Cobley); One, Mizen Head, 12th June (P.Moore).

Galway One: One, High Island, 6th August (A.Bennison).

You need a slice of luck to see Red-rumped Swallow in Ireland as, generally speaking, they do not hang around. Only fourteen of the 53 records were present for more than one day. The longest to remain was one for nine days on Tory Island, Donegal from 27th October to 4th November 2007 (*Irish Birds* 8: 602), followed by another that was present for seven days at Tacumshin Lake, Wexford from 17th to 23rd May

2012 (*Irish Birds* 9: 600), but these were very much exceptions to the rule. Four remained for three days, eight were present for two and the remaining 39 were all recorded on just a single date. Apart from December and January they have occurred in all months although there is a clear peak in April and May with fifteen each suggesting spring overshoots and a smaller peak in October and November with nine and five respectively. The Mizen Head bird is the third June record and the High Island individual is the first for August.

Cetti's Warbler Cettia cetti (0; 4; 0)

2013 Wicklow One: Probably a female, trapped, East Coast Nature Reserve, Blackditch, Newcastle, 3rd November (D.Moran, N.Tierney). Niall Tierney had set up a 60-foot mist net in BirdWatch Ireland's East Coast Nature Reserve with the intention of trapping Goldfinches Carduelis carduelis. At 11:30 he approached the net during one of his rounds and noticed a bird trapped in it showing warm brown upperparts, grey underside and a prominent eye-ring and supercilium. He immediately recognised it as a Cetti's Warbler, a species he had handled previously in Britain and Belgium. In the hand he found wing length and formula to be consistent with Svensson (1992). The measured wing length of 57 millimetres suggested a female, however sample sizes in Svensson are small and there appears to be some regional variation. Following release the bird exhibited its characteristic tail-cocking behaviour as it hopped off through nearby vegetation and was not seen again.

Arctic Warbler Phylloscopus borealis (0; 11; 3)

Galway Two: One, Inishbofin, 13th to 14th September (A.McGeehan *et al.*), photograph *Wings* 79: 29; One, Inishmore, Aran Islands, 11th October, photographed (D.Breen).

Mayo One: One, Glenlara, Mullet Peninsula, 22nd to 28th October, photographed (M.Reilly, D.Suddaby *et al.*).

2014 Cork One: One, Mizen Head, 21st to 22nd September (R.T.Mills *et al.*), photograph *Wings* 75: 28.

For the first time in an Irish bird report multiple records of this mainly northern Palearctic warbler. The bird on Mizen Head is the eighth for Cork in contrast to the Mayo and Galway records, which are the first for those counties.

About 12:30 on 21st September 2014 Richard Mills was on the road from Lissagriffin to Mizen Head, by the main Mizen garden. He was hoping to photograph a Yellow-browed Warbler *P. inornatus*, which was one of his bogey birds to photograph. His attention was drawn to a rather loud and unusual call that appeared to be coming from a *Phylloscopus* warbler high in a tree. Fortunately he was able to fire off some pictures before it flew across the road, where it proved difficult to see and impossible to photograph. Suspecting it was an Arctic Warbler, Richard emailed the pictures to Killian Mullarney who confirmed the identification. It was still present the following morning when better views were obtained.



Plate 213. Arctic Warbler Phylloscopus borealis, Inishmore, Galway, October 2015 (Dermot Breen).

In the early afternoon of 22nd October, Michael Reilly found a warbler in a vegetated garden in Glenlara that he considered 'a very good shout for an Arctic Warbler'. He texted the news to Dave Suddaby, then raced back to his car to check details in his *Collins Bird Guide* (Svensson *et al.* 2009), but on his return could not locate the bird and had to leave without seeing it again that day. Dave arrived shortly after and soon relocated it calling from within a small patch of Willows *Salix* sp., and he was able to note all the important features required to confirm Michael's earlier suspicion. In the coming days the bird was seen well by several visiting birders until last observed on the 28th October.

Radde's Warbler

Phylloscopus schwarzi (0; 16; 1)

Galway One: One, Inishbofin, 6th October, photographed (A.McGeehan $\it et al.$).

This is the first for Galway and the second for the northwest coast following one at Achill Island, Mayo in 2001 (*Irish Birds* 7: 236). All seventeen records have arrived between 2nd and 30th October.

Dusky Warbler *Phylloscopus fuscatus* (0; 10; 1) **Cork** One: One, Knockadoon Head, 28th to 31st October, photographed (R.McLaughlin *et al.*).

The three east Cork headlands of Knockadoon, Ballycotton and Power Head have all now recorded a Dusky Warbler. This bird was found on a short stretch of laneway that has previously hosted Hume's *P. humei*, Pallas's *P. proregulus* and Yellow-browed *P. inornatus* Warblers. It was observed to move inland on its final day.

Western Bonelli's Warbler

Phylloscopus bonelli (0; 14; 1)

Cork One: One, Galley Head, 8th September, photographed (C.Barton *et al.*).

After birding for an hour at Galley Head, all Colin Barton had to show for his efforts were a couple of Northern Wheatears *Oenanthe oenanthe* and a late Swift *Apus apus*. Arriving at some Sycamores *Acer* sp., he heard a 'weird *Phylloscopus*-type' call, not unlike Willow Warbler *P. trochilus* but a higher pitched and thinner 'hoo-eet'. He had no difficulty in locating the bird as it perched in the open close by. It showed a pale grey head, wide supercilium, greenish fringes to the primaries,



Plate 214. Dusky Warbler *Phylloscopus fuscatus*, Knockadoon Head, Cork, October 2015 (Norma Gleeson).



Plate 215. Siberian Chiffchaff *Phylloscopus collybita tristis*, Cape Clear Island, Cork, October 2015 (Richard H. Coombes).

darkish legs and really clean pale grey/white underparts. Then, a Willow Warbler *P. trochilus* hopped up beside it and the Willow Warbler was clearly larger. Colin realised it was a Bonelli's Warbler and based on the call heard, a Western Bonelli's Warbler. He texted and called some others but unfortunately by the time they arrived the bird had moved high into a Pine tree *Pinus* sp. and was proving difficult to see. Later that afternoon it was observed briefly, when some record shots were taken.

Western Bonelli's Warbler has never occurred outside of August, September and October and has never been recorded in any county other than Cork, Waterford and Wexford. This is the eighth in September and ninth in Cork, although perhaps surprisingly the first at Galley Head.

Western/Eastern Bonelli's Warbler

Phylloscopus bonelli/orientalis (0; 1; 0)

2014 Cork One: One, Cotter's Garden, Cape Clear Island, 10th September, photographed (R.H.Coombes).

In the critical absence of a call being heard and despite an exemplary written description submitted by the observer, regrettably the specific identity of this bird as either a Western or Eastern Bonelli's Warbler cannot be confirmed.

Siberian Chiffchaff

Phylloscopus collybita tristis (2; 39; 27)

Cork Twelve: Up to four, Rossmore Quarry, Carrigtwohill, 23rd February to 6th April, photographed (S.Ronayne *et al.*); One, Tramore River, near Ballyphehane, Cork City, 25th March, photographed

(D.McGrath), then, presumed same, Tramore River, near Ballyphehane, Cork City, 27th December (D.McGrath); One, Dursey Island, 10th October (K.Grace, D.A.Scott); One, Cotter's Garden, Cape Clear Island, 10th to 17th October, photographed (R.H.Coombes, S.Enright, M.Hanafin *et al.*); One, Firkeel Glen, West Beara, 11th October (K.Grace); One, Galley Head, 15th to 19th October (C.Barton); One, Firkeel Glen, West Beara, 18th October to 1st November (K.Grace, A.A.K.Lancaster, F.Moore *et al.*); One, Dursey Island, 21st October to 1st November (D.A.Scott *et al.*); One, Knockadoon Head, 28th to 31st October, photographed (R.McLaughlin, P.Moore *et al.*).

Dublin One: One, Ballymun, 9th February, photographed (Mi.Keating).

Galway Two: One, Inishbofin, 1st to 3rd November, photographed (A.McGeehan); One, Slyne Head, 2nd November, photographed (D.Breen).

Kerry Nine: At least six, Ross Castle, Killarney, 23rd January to 17th February, trapped and ringed (D.Farrar *et al.*), photograph *Irish Birds* 10: 269; One, Bolus Head, Iveragh Peninsula, 9th to 19th October, photographed (E.Dempsey, M.O'Clery *et al.*); A second individual, Bolus Head, Iveragh Peninsula, 17th October, photographed (P.McDaid); One, Ballyseedy Wood, Tralee, 8th November (E.Carty). **Limerick** One: One, Coonagh Nature Reserve, 24th January

Waterford One: One, Ardmore, 17th January, photographed (A.Malcolm).

Wexford One: One, Hook Head, 31st October (K.Grace).

The January and February birds at Ross Castle were recorded during survey work undertaken to determine the origins of the many Chiffchaffs wintering there (O'Mahony *et al.* 2015). In addition to those trapped there were other unringed birds present which were considered to be *tristis*, making six the minimum total. Feathers dropped by birds during processing

Irish Birds 10 (2016) 417

(T.Tarpey).



Plate 216. Subalpine Warbler Sylvia cantillans, Brownstown Head, Waterford, April 2015 (Séamus Feeney).

were saved and a total of eight samples were sent to the University of Aberdeen for DNA sequencing. The results showed the samples included three nominate Chiffchaff, four *tristis* and a single Scandinavian Chiffchaff *abietimus*.

Barred Warbler Sylvia nisoria (6; 197; 7)

Cork Five: First-winter, Old Head of Kinsale, 15th September (R.O'Driscoll); First-winter, Firkeel, West Beara, 30th September to 18th October (A.A.K.Lancaster *et al.*); First-winter, Ballinacarraige, West Beara, 1st October (K.Grace, A.A.K.Lancaster); First-winter, Mizen Head, 11th October (D.Ballard); First-winter, Mizen Head, 28th to 31st October (C.O'Sullivan *et al.*).

Mayo One: First-winter, Erris Head, 14th September, photographed (R.Innes, C.Jones).

Wexford One: First-winter, Hook Head, 31st October (K.Grace). This is the fourteenth consecutive autumn that Barred Warbler has occurred with an average of just over eight during that time. Perhaps surprisingly it has never been recorded in spring.

Subalpine Warbler *Sylvia cantillans* (2; 51; 1) **Waterford** One: First-summer male, Brownstown Head, 11th to 17th April (M.Cowming *et al.*), photographs *Birdwatch* 276: 20, *Wings* 78: 28.

This is the second record for both Waterford and Brownstown Head following a male there in May 2008 (*Irish Birds* 9: 98). The statistics exclude the single occurrence of the southeastern European form *S.c. albistriata*.

Icterine Warbler *Hippolais icterina* (2; 219; 1) **Cork** One: One, Garinish, West Beara, 19th September (A.A.K.Lancaster).

Found in hillside scrub near Garinish Cross by long-time West Beara regular Tony Lancaster. European populations of this long-distance migrant have decreased over recent decades, showing a loss of 42% from 1980 to 2011 and 12% from 1990 to 2011 (PECBMS 2013). Prior to 1960 there were just twelve Irish records but in the four decades to the end of the century numbers increased considerably producing an average of 48. The largest total was in the 1960s (50) and the smallest in the 1970s (41). Since 2000 numbers here reflect the general decline, with just eighteen in the 2000s, including three blank years (2000, 2001 and 2004). In 2010 there was a return to historic numbers with seven, which proved all too brief however, as it was then followed by three blank years until a single record in 2014 and again this year.

Melodious Warbler Hippolais polyglotta (2; 203; 4)

Cork Two: One, Mizen Head, 22nd September (D.Ballard, C.O'Sullivan); A different individual, Mizen Head, 25th September (D.Ballard *et al.*).

Galway One: One, Inishmore, Aran Islands, 5th October (A.A.Kelly, P.Kelly).

Wexford One: One, Great Saltee Island, 12th September, photographed (K.Grace *et al.*).

The Inishmore bird is the first Galway record. In contrast, Cork and Wexford have accumulated the most with 129 and 54 respectively.

Blyth's Reed Warbler

Acrocephalus dumetorum (0; 11; 1)

Cork One: One, Garinish, West Beara, 5th to 6th October, photographed (K.Grace, A.A.K.Lancaster).

2011 Cork One: One, Cotter's Garden, Cape Clear Island, 3rd to 5th October (A.Dalton, S.Wing).

Early on 3rd October 2011 in Cotter's Garden, Steve Wing found an unstreaked *Acrocephalus* warbler that showed an extremely short primary projection. He beckoned to Alan Dalton, who was nearby, to join him and as they watched the bird it uttered a short, slightly grating 'teck'. Despite its skulking behaviour, they managed to get brief views of it over the next few hours as it toured Cotter's, calling frequently, until it finally settled in an *Escalonia* thicket at the top of the garden and became silent. From what they had observed they were beginning to suspect it was a Blyth's Reed Warbler. Later that afternoon it was heard again and seen briefly the following day but it wasn't until the morning of the 5th that Alan Dalton eventually managed to get clear and close views allowing him to check for all the key features needed to confirm the identification as Blyth's Reed Warbler.

The Garinish bird proved to be an equally frustrating individual that required much time and patience, before finally giving itself up to Tony Lancaster. It had first come to his attention when he heard it calling a persistent 'tuk' or 'tut'. Despite its close proximity he could not get on to it, something he badly wanted to do as he was coming to the conclusion it was very likely a Blyth's Reed Warbler. Eventually he managed brief but clear views revealing the bunched primaries, overall pallid appearance (especially on the underparts), a supercilium that was brightest in front of the eye and the overall bronze upperparts of a Blyth's Reed Warbler. He was later joined by Kieran Grace, and despite it never being on show for any length of time they managed to keep track of it, mainly by following the call. The weather the following morning was dreadful, with strong winds and persistent rain, but it cleared in the afternoon when the bird again proved elusive and was observed only briefly.

Cedar Waxwing *Bombycilla cedrorum* (0; 2; 1) **Clare** One: One, Kilrush, 3rd to 4th June, photographed (Ma.Keating, J.N.Murphy).

This bird was seen in a Kilrush garden feeding on *Cotoneaster* buds and recognised as a waxwing, however it took a few phone calls and a picture before identification as a Cedar Waxwing was realised.

There have been twelve records in the Western Palearctic where, in addition to two previous Irish there are six British (including an influx of three in 2015), two Icelandic and one Azorean. The two previous Irish were a first-winter on Inishbofin, Galway on 14th October 2009 (*Irish Birds* 9: 275, McGeehan & Nash 2009) and a first-winter at Tarmon on the Mullet Peninsula, Mayo on 10th November 2012 (*Irish Birds* 9: 603).

Rose-coloured Starling Pastor roseus

(41; 106; 2)

Cork One: Juvenile, Mizen Head, 11th to 21st October, photographed (D.Ballard *et al.*).

Dublin One: Juvenile, Balscadden, Howth, 17th to 23rd November (M.Stewart *et al.*), photographs *Birdwatch* 283: 20, *Wings* 80: 29.

Rose-coloured Starlings tend to arrive in one of two distinct waves, i.e. adults and, to a lesser extent, first-years in summer and juveniles in autumn and this year's birds fall squarely in the latter group. Cork has hosted the majority of autumn juveniles and the Mizen Head bird becomes its twenty-sixth, whereas the bird in Howth is only the second autumn juvenile in Dublin.



Plate 217. Rose-coloured Starling *Pastor roseus*, Howth, Dublin, November 2015 (Tom Shevlin).

Grey-cheeked Thrush Catharus minimus (0: 8: 1)

Mayo One: One, Termoncarragh, Mullet Peninsula, 25th May (D.Suddaby *et al.*), (Suddaby 2015), photographs *Birdwatch* 277: 8-9. This is the first for Mayo and the first spring record. All previous records have occurred during October, with seven in Cork (four at Cape Clear Island, two at Dursey Island and one at Old Head of Kinsale) and a single Clare record at Loop Head

Nightingale Luscinia megarhynchos (0; 34; 2)

Wexford Two: One, Great Saltee Island, 10th April (K.Mullarney *et al.*), photograph *Wings* 78: 28; A different individual, Great Saltee Island, 17th April (T.Murray).

The bird on the 10th April was found around the landing area and the second was in brambles near the Airfield and was part of a large fall of migrants that day. These are the fifteenth and sixteenth records for Great Saltee Island and the fourth time it hosted two in the same month.

Bluethroat Luscinia svecica (0: 42: 2)

Clare One: First-winter female, Loop Head, 6th October, photographed (K.Mullarney, J.N.Murphy).

Wicklow One: Adult male, Wicklow Head, 30th May, photographed (M.Hogan).

This is the first county record for Wicklow and the second county record for Clare, coincidentally found on the same date as the first in Shannon in 1982 (*Irish Birds* 2: 570).



Plate 218. Bluethroat *Luscinia svecica*, Loop Head, Clare, October 2015 (Killian Mullarney).



Plate 219. Nightingale *Luscinia megarhynchos*, Great Saltee Island, Wexford, April 2015, the first of two there that month (Killian Mullarney).

Red-flanked Bluetail *Tarsiger cyanurus* (0; 4; 1)

Cork One: First-winter, Caher West, Mizen Head, 20th October (D.Ballard *per* IRBC).

While birding near a garden on Mizen Head, Dan Ballard noticed a bird about the size of a Robin *Erithacus rubecula* fly in to a Pine tree *Pimus* sp. Expecting a flycatcher, he was rather taken aback by the dirty white underparts and orange flanks that he observed on the partly obscured bird. It then shifted position revealing a gleaming white throat, and he immediately realised it was a Red-flanked Bluetail, a bird he had long hoped to see on Mizen Head. It remained on view, moving about the garden for fifteen minutes, occasionally flycatching. At times, the cobalt blue tail was very obvious when it perched on lower branches.

Blue-headed Wagtail

Motacilla flava flava (0; 69; 3)

Cork Two: Male, Ballycotton, 31st May, photographed (P.Moore); One, Mizen Head, 22nd September (D.Ballard, C.O'Sullivan).

Wexford One: Male, Tacumshin Lake, 11th September (P.Kelly).

These are classic dates and locations for this spring and autumn migrant. The Cork records are the seventh for May (third at Ballycotton) and eighth for September (with this the first record away from Cape Clear Island). In Wexford, it is the fifth for September and the second at Tacumshin Lake.

Yellow Wagtail taxonomy is complex, with at least thirteen subspecies described, and some authorities treat the eastern and western forms as distinct species. There are six forms on the Irish List; flavissima (Yellow Wagtail), flava (Blue-headed Wagtail), cinereocapilla (Ashy-headed Wagtail), thunbergi (Grey-headed Wagtail), feldegg (Black-headed Wagtail) and either plexa or tschutschensis (North-eastern Wagtail). Of these, *flavissima* is the only form not reported in Irish Rare Bird Reports, being the most common. In addition, it has a history of regular breeding up to the mid 1940s and irregular breeding since (Hillis 2007 & 2009, Hutchinson 1989, Newton 2015). Of the others, both Blue-headed and Ashy-headed Wagtails have bred but are better regarded as a rare passage migrant and a vagrant respectively. Grey-headed Wagtail is a very rare vagrant with seven records. Finally, there are single records of both Black-headed (Irish Birds 8: 604) and Northeastern Wagtails (Irish Birds 10: 256).

Citrine Waqtail Motacilla citreola (0; 30; 2)

Cork One: First-winter, Ballycotton, 3rd October, photographed (R.McLaughlin *et al.*).

Wexford One: Juvenile, Tacumshin Lake, 29th August, photographed (P.Kelly, T.Kilbane *et al.*).

All nine Wexford records have been at Tacumshin Lake. Of the eight in Cork, this is the sixth for Ballycotton and the other two were at Lissagriffin.

Richard's Pipit Anthus richardi (2; 106; 14)

At sea Zero: One, 40 nautical miles southeast of Hook Head, Wexford, 9th October (N.T.Keogh, M.O'Donovan, D.Reidy).

Clare Two: Two, Loop Head, one from 13th to 16th October (J.N.Murphy *et al.*), with a second present 15th October, photographed (M.Gibson, F.MacGabhann, J.N.Murphy).

Cork Two: One, Galley Head, 11th October (C.Barton); One, Killough, West Beara, 18th October (F.Moore).

Donegal Four: Four, Tory Island, three from 1st to 6th October, photographed (R.Vaughan *et al.*), with a fourth present 4th October, photographed (S.Feeney *et al.*).

Galway One: One, Claddagh, 29th October (C.Cronin).

Kerry Two: One, Bolus Head, Iveragh Peninsula, 8th October (K.Cronin); One, Bolus Head, Iveragh Peninsula, 3rd November (M.O'Clery).

Mayo One: One, Annagh Marsh, Mullet Peninsula, 28th September (D.Suddaby *et al.*).

Wexford Two: One, Ballyteige, 16th September (T.Murray); One, Tacumshin Lake, 1st November (K.Grace, P.Kelly, A.Walsh).

These include the first records for the west coast counties of Galway and Mayo and the second for Kerry. Dates could not be more typical as October dominates this species statistics with September and November best supporting months. There are 86 (just over 70%) of the overall total in October, followed by eighteen in November and eleven in September. Other months with records are December (three), February (two) and April and August (one each).

The 'at sea' record was observed from the *RV Celtic Explorer* during offshore seabird surveys. It circled the ship once calling loudly while pursued by a Great Black-backed Gull *Larus marinus*, before departing to the west. Coincidentally, another was observed the previous day in the



Plate 220. Richard's Pipit *Anthus richardi*, Tory Island, Donegal, October 2015 (Séamus Feeney).

English Channel from the *RV Cefas Endeavour* in a position 35 nautical miles south of Prawle Point, Devon (*per* Mike Bailey/MARINElife).

Olive-backed Pipit Anthus hodgsoni (0; 8; 1)

Kerry One: One, Bolus Head, Iveragh Peninsula, 30th September, photographed (M.O'Clery).

Found by Michael O'Clery at a relatively unwatched but potentially rewarding Kerry headland. This is the first for Kerry and the third away from Cork; the others being the first Irish record at Great Saltee Island, Wexford in 1978 (*Irish Birds* 1: 582) and another at Inishmore, Galway in 2012 (*Irish Birds* 9: 606). Seven of the previous records were in October and this was only one day short of adding to that total.

Red-throated Pipit Anthus cervinus (0; 52; 2)

Donegal One: One, Tory Island, 30th September (R.Vaughan).

Kerry One: One, Carrahane Strand, 8th to 9th October (E.Dempsey, M.O'Clery *et al.*).

This is the first record for Donegal and only the fifth away from the southern counties of Kerry, Cork and Wexford. October is the prime month of occurrence with 30 or 56% of the total.

Scandinavian Rock Pipit

Anthus petrosus littoralis (0; 84; 14)

Cork Three: One, Pallas Strand, Eyeries, West Beara, 15th March (F.Moore); Two, Roche's Point, Cork Harbour, 29th March (T.Gittings). **Donegal** One: One, Malin Head, 13th March (R.McLaughlin).

Dublin One: One, West Pier, Dun Laoghaire Harbour, 13th to 28th November (N.Keogh, J.Proudfoot *et al.*).

Kerry Seven: One, Black Rock Strand, 5th to 31st March, photographed (D.A.O'Connor *et al.*); Two, Kilshannig, Magharees, 6th March to 1st April (D.Farrar *et al.*), with a third present 1st April (D.Farrar); One, Carrig Island, near Ballylongford, 13th to 22nd March (D.Farrar *et al.*) and a second from 20th to 22nd March, photographed (D.Farrar *et al.*); One, Castlegregory, 18th March, photographed (D.A.O'Connor).

Wexford One: One, Nethertown, 17th March (K.Grace).

Wicklow One: One, Broad Lough, 29th November (C.Cardiff). Equals the fourteen in 2014 and falls just two short of the

Equals the fourteen in 2014 and falls just two short of the best ever total in 2013 (*Irish Birds* 10: 96). As is normally the case, the majority were recorded in March and April, a time when identification becomes more straightforward as they begin to acquire summer plumage, when, among other features, they can often show a conspicuous pink-wash to the breast. The November birds are just the second and third for that month following an adult, which was trapped while at Groomsport, Down from 11th October to 11th November 1996. It had been ringed as a first-year at Randaberg, Norway on 10th November 1995 (*Irish Birds* 7: 102).

Water Pipit Anthus spinoletta (1; 149; 6)

Cork Two: One, Ballybrannagan Strand, 17th March (T.Gittings); One, Lough Beg, Cork Harbour, 9th November (C.Cronin).



Plate 221. Water Pipit *Anthus spinoletta*, Tacumshin Lake, Wexford, November 2015 (Paul & Andrea Kelly).

Kerry One: One, Carrahane Strand, from 2nd December 2014 (*Irish Birds* 10: 257) remained to 5th February; Adult winter, Kilshannig, 2nd January to 21st February (E.Carty).

Wexford Three: One, Tacumshin Lake, from 29th November 2014 (*Irish Birds* 10: 257) remained to 28th March; Two, Tacumshin Lake, 1st November with one remaining to 11th December, photographed (P.Kelly); One, South Slob, 30th to 31st December, photographed (P.Kelly, M.Noonan).

Water Pipit is a rare, though regular, winter visitor, presumably from alpine regions of central and southern Europe. Three in Wexford continue a pattern of birds there every year (apart from 2009) since 2003. The two largest gatherings ever recorded in Ireland were during that time at Tacumshin Lake with eight on 19th November 2005 (*Irish Birds* 8: 389) and eleven from 26th to 30th December 2007 (*Irish Birds* 8: 602).

Hawfinch Coccothraustes coccothraustes (Unknown; 215; 3)

Cork One: One, Ballinacarraige, West Beara, 17th April (D.Durrell, P.Durrell).

Kildare One: One, Sallins, 28th February (P.Kelly).

Limerick One: One, Curraghchase Forest Park, 17th March, photographed (A.G.Kelly).

For the fifth year in succession, Curraghchase Forest Park has hosted this attractive finch. It is possible that it is the same individual that was present there on 30th December 2014 (*Irish Birds* 10: 258), but is here treated as new. The bird at Sallins is the first for Kildare in 113 years. During each breeding season from 1896 to 1902 Hawfinches were observed

at Straffan, Kildare (about six miles from Sallins), and in 1902 an adult was observed to feed young there (Kennedy *et al.* 1954).

Curraghchase Forest Park recorded an exceptional influx of Hawfinches in the late 1980s. About 35 were present from October 1988 (*Irish Birds* 4: 110) remaining to 1989 and increasing in number to about 95 until they departed in early March (*Irish Birds* 4: 225). More recently, two adults were observed tending a juvenile in Ballyvaughan, Clare on 3rd and 4th September 1991, raising the possibility that breeding had taken place somewhere in 1991, perhaps involving birds that were part of the large influx of 1988/1989 remaining unnoticed in the general area (*Irish Birds* 4: 606).

Common Rosefinch *Erythrina erythrina* (0; 228; 8)

Cork Two: Juvenile, Galley Head, 11th September (C.Barton); Juvenile, Ballinacarraige, West Beara, 15th October (K.Grace, A.A.K.Lancaster). Donegal Two: Juvenile, Tory Island, 6th to 10th September (M.Meegan et al.); Juvenile, Tory Island, 17th to 19th September (T.Campbell, C.Ingram et al.).

Galway Three: Adult male, Inishbofin, 12th June (A.McGeehan); Two juveniles, Inishbofin, 14th September (D.Breen, A.McGeehan, A.O'Donaill).

Wexford One: First-summer male, Great Saltee Island, 7th June, photographed (B.Power).

These records fall within the range of expected arrival dates of this predominantly autumn vagrant that also shows a secondary peak in June. The geographic spread is also typical as these are the four counties with the highest totals. Cork is well out in front with 134 followed by Donegal (32), Wexford (21) and Galway (twenty).

Greenland Redpoll

Acanthis flammea rostrata (13; 39; 1)

Cork One: One, Dursey Island, 19th October (K.Grace).

This bird was found along the track at Kilmichael village associating with ten Lesser Redpolls *A.f. cabaret* and was part of a small arrival on Dursey Island that day that included two Yellow-browed Warblers *Phylloscopus inornatus* and single Jack Snipe *Lymnocryptes minimus*, Ring Ouzel *Turdus torquatus* and Whinchat *Saxicola rubetra*.

Two-barred Crossbill Loxia leucoptera (4; 0; 1)

Mayo One: Male, Tarmon, Mullet Peninsula, 15th October (D.Suddaby).

From his kitchen window at breakfast time on 15th October Dave Suddaby could see that birds were on the move, including small parties of Crossbills *Loxia curvirostra* and winter thrushes. Encouraged, he left the house about 09:00 and made his way to a favourite migration observation point

nearby. Within 30 minutes he had counted 36 Crossbills in small groups heading south. Instead of carrying on, the next group landed in the tops of some conifers about 25 metres distant. While scanning this group Dave was immediately struck by an obviously wing-barred individual, initially side on and then back on – it was clearly a male Two-barred Crossbill, a species he had previously observed on numerous occasions in Shetland. Fortunately, it remained in full view long enough for all the salient features to be noted, before it dropped out of sight in the conifer. Thereafter his views were largely obscured and after a short while, the group began to give 'excited' calls before exploding from the conifer and landing in another group of conifers further off. Some of this group, including the male Two-barred Crossbill, then made a short flight before re-joining the rest, allowing Dave to clearly see its two broad white wing-bars. The flock remained in the vicinity for the next twenty minutes or so feeding among the conifers, but never gave great views. Then, apparently unprovoked, they all got up and headed off purposefully to the southwest. Unfortunately, and despite extensive searching around the Tarmon and Blacksod areas of the Mullet Peninsula, the Twobarred Crossbill was not seen again.

Although the fifth Irish record, this is its first appearance in an Irish Bird Report as all others occurred long before the first report for 1953. The first three were in the 19th century and all were shot; a female was in Grenville near Belfast on 11th January 1802, another female in Templepatrick, Antrim in 1867, and a male in Tempo Manor Estate, near Edenmore, Fermanagh on 17th February 1895 (Ussher & Warren 1900). The fourth, a male, was shot near Crumlin, Antrim on 2nd August 1927 (Kennedy *et al.* 1954). This record moves Twobarred Crossbill from Category B of the Irish List to Category A.

Dark-eyed Junco Junco hyemalis (1; 2; 1)

Cork One: Adult male, Tilickafinna, Dursey Island, 9th June (D.A.Scott, J.E.Scott *et al.*), (Scott 2015), photographs *Birdwatch* 277: 14 and 278: 12, *Wings* 78: 28.

While stocking the bird table in his famed garden on Dursey Island, Derek Scott heard an unfamiliar song. To his great surprise he discovered it was coming from a Dark-eyed Junco sitting in full view in a nearby conifer. He immediately went inside to alert his wife Joanna and fetch his camera and on their return found it feeding on the bird table. It remained until just after 21:00 and was successfully twitched by seventeen birders. This report also includes a record of Little Bunting in the same garden, adding to its long list of rarities that includes Sardinian Warbler *Sylvia melanocephala* (2014), Arctic Warbler *Phylloscopus borealis* (2013), Wilson's Warbler *Cardellina pusilla* (2013), Blyth's Reed Warbler *Acrocephalus dumetorum* (2010), Blackpoll Warbler *Setophaga striata* (2006) and Dartford Warbler *Sylvia undata* (1999).



Plate 222. Dark-eyed Junco Junco hyemalis, Dursey Island, Cork, June 2015 (Victor Caschera).

The three previous records were; Loop Head, Clare on 30th May 1905 (*IBR* 3: 25 and 8: 3-4), which was also the first Western Palearctic record, followed by a male at Ballygannon, Wicklow on 10th August 2000 (*Irish Birds* 7: 573) and a female or first-year male at Whitehead, Antrim on 30th May 2004 (*Irish Birds* 8: 392). Since the first British record in 1960 there have been 39 to 2015 and about 55 Western Palearctic records overall.

Ortolan Bunting Emberiza hortulana (0; 124; 4) Cork Three: One, Galley Head, 12th September (C.Cronin); A different individual, Galley Head, 13th September (C.Barton *et al.*); One, Mizen Head, 29th September (D.Ballard).

Dublin One: Female, Rockabill Island, 26th May (B.Burke, A.Power), photograph *Birdwatch* 277: 19.

Rockabill lies just off Skerries in north Dublin and consists of two granite islands, the Rock and the Bill that are separated by a 20 metre channel. Best known for its breeding terns, including Europe's largest Roseate Tern Sterna dougallii colony, Rockabill has also recorded some significant rarities, including first Irish records of Water Pipit Anthus spinoletta, Pallas's Grasshopper Warbler Locustella certbiola and Little Bunting Emberiza pusilla and now adds Ortolan Bunting to the Dublin list. This female was briefly observed feeding on the more northerly and less vegetated Bill in the early afternoon. The last week of May is an early record, although

there are ten earlier including the first Irish record (a pair) near the old Newcastle Train Station, Wicklow on 18th April 1953 (Kennedy *et al.* 1954). In contrast the three Cork records could not be more typical. Out of 128 records, 91 have been in Cork and of those 59 were in September.

Little Bunting Emberiza pusilla (3; 38; 3)

Cork Two: One, Mizen Head, 10th October (M.Shorten, P.Wolstenholme); One, Dursey Island, 17th to 19th October (D.A.Scott *et al.*).

Donegal One: One, Tory Island, 5th November, photographed (T.Campbell, C.Ingram).

The two Cork records neatly fit the expected arrival dates of this mainly autumn vagrant that shows a distinct October peak. Of the 44 to date, 27 were in October with seventeen of these in Cork. The bird on Dursey Island was first noticed by Derek Scott as it flew from the southwest into his garden uttering a thin 'seep' as it landed in a patch of Willows *Salix* sp. It showed well for about one minute before departing with a small flock of Goldfinch *Carduelis carduelis*. Looked for but not seen on the 18th, it was relocated by Tony Lancaster near the 'Ovenbird Hedge' shortly after mid-day on the 19th and again later that same afternoon by Kieran Grace. This is the seventh Little Bunting for Dursey Island and all have occurred between 3rd and 23rd October. The bird on Tory Island is the third there in November and the seventh overall for Donegal.



Plate 223. Ortolan Bunting Emberiza hortulana, Rockabill, Dublin, 26th May 2015 (Andrew Power).



Plate 224. Rustic Bunting Emberiza rustica, Cape Clear Island, Cork, October 2015 (Tom Shevlin).

Rustic Bunting Emberiza rustica (0; 19; 1)

Cork One: One, Central Bog, Cape Clear Island, 5th October, photographed (T.Shevlin).

This is the first since one on nearby Sherkin Island on 18th October 2005 (Irish Birds 8: 392). While checking Central Bog for migrants early on 5th October, Tom Shevlin noticed a bird in wet grass about 10 metres off. He initially thought it was a Reed Bunting Emberiza schoeniclus, however, something did not quite fit, so he moved closer to get a clearer view and take some photos. Still not completely certain of its identity he quickly shot off some pictures. As he viewed them in the camera's LCD screen he noticed a combination of stripy head pattern, creamy supercilium, crown stripe and rusty flanks confirming that it was a Rustic Bunting. It continued to feed in the wet grass allowing Tom to take some more pictures before it moved further off to a muddy area where it associated with Dunnocks Prunella modularis. As the bird seemed to be well settled Tom left to alert others, but it was not present on their return, nor was it subsequently found despite much searching. The first Irish record was a male in the Post Office Garden at Cape Clear Island on 9th October 1959 (IBR 7: 23) and this is the tenth record for the island, comprising eight October birds and singles in April and June.

Ovenbird Seiurus aurocapilla (0; 3; 0)

2014 Cork One: One, Mizen Head, 27th September (A.Duggan). With hardly a migrant in sight on Mizen Head, Aidan Duggan considered giving up on the headland and heading off through the sand dunes towards Lissagriffin in the hope of finding a good wader. Fortunately, he gave it a few more minutes and that decision made the world of difference to the day's outcome. He had checked the main Mizen garden on the road that leads to the lighthouse without success but as he

emerged back on the road a small bird flew from low down on the opposite ditch and continued around the corner of the track that led to the side of the lower garden. It was roughly finch sized and his initial thought was that it was probably a Chaffinch Fringilla coelebs or similar. Nevertheless, he decided to follow and arriving at the entrance to the track he flushed the same bird from just a metre away only to see it bury itself in some freshly fallen Japanese Knotweed Fallopia japonica leaves. Now it was only a matter of waiting for the bird to reveal itself, which it did, but in a peculiar reverse movement and then, frustratingly, it stopped while still only half-way out! He could see brilliant white underparts with bold black streaking and spots and olive toned upperparts, making Olive-backed Pipit Anthus hodgsoni a possibility. With his heart thumping hard, he waited for the bird to show fully and when it did he immediately checked the head expecting an Olive-backed Pipit type supercilium, instead he saw a plain face with a large dark eye and a massive white eye-ring; it looked like an Ovenbird! The bird then looked straight at Aidan and erected its orange crown feathers; it was an Ovenbird! It remained close by picking amongst the leaf litter with a cocked tail and head bobbing back and forth, all the while walking with a bizarre hen-like gait. A few birders managed to get to the Mizen that afternoon but the bird was not relocated.

There are two previous records; the first Irish and second Western Palearctic record was found dead at Derrinrush Forest, Lough Carra, Mayo on 8th December 1977 (*Irish Birds* 2: 118, Wilson 1980) and the second Irish and fourth Western Palearctic was near Tillickafinna, Dursey Island, Cork on 24th and 25th September 1990 (Grace & Lancaster 1990, *Irish Birds* 4: 459).

Appendix 1: Contributors

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Irish Rare Breeding Birds Panel (IRBBP)

Appendix 2: List of records not proven

This list includes all records of taxa set out in *Irish Birds* 7: 416-418 (and subsequent updates online at www.irbc.ie/records/desclist.php and www.irbc.ie/records/desclist1.php) which, after circulation to the Irish Rare Birds Committee were considered to be not proven. Records of birds not attributed to any definite species by the observers are not included, nor are birds considered to have been escapes from captivity.

2015 records not proven

Continental Cormorant *Phalacrocorax carbo sinensis* Adult, Ferrybank, Wexford, 28th March.

Adult, Greystones, Wicklow, 23rd November.

Goshawk Accipiter gentilis

One, Ladysbridge, Cork, 6th January.

One, Lullymore West, Kildare, 6th December.

Baltic Gull Larus fuscus fuscus

First calendar-year, Grange Castle Business Park, Dublin, 25th October.

Siberian Chiffchaff *Phylloscopus collybita tristis* One, Pollardstown Fen, Kildare, 28th March.

2014 records not proven

Violet Green Swallow *Tachycineta thalassina* One, Turvey, Rogerstown, Dublin, mid-June.

2013 records not proven

Atlantic Gull *Larus michabellis atlantis* One, Baltimore, Cork, 5th December.

Appendix 3: List of anonymous records not accepted

The following reports concern Appendix 2 rarities that were entered in the Provisional List of Rare Bird Sightings during 2015 but where the observers have to date remained unknown. Some or all of these reports may yet qualify for publication in a future IRBR, should the observers become known to the IRBC and be prepared to validate the report.

Black Brant Branta bernicla nigricans
One, Blennerville, Kerry, 25th February.
Glossy Ibis Plegadis falcinellus
One, Castletownshend, Cork, 10th October.
American Golden Plover Pluvialis dominica
One, Tory Island, Donegal, 4th October.

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Abbreviations used

AERC: Association of European Rarities Committees.

BBRC: British Birds Rarity Committee.

GAA: Gaelic Athletic Association.

IBR: Irish Bird Report, annual from 1953 to 2003.

IRBBP: Irish Rare Breeding Birds Panel.

IRBR: Irish Rare Bird Report, annual from 2004.

LCD: Liquid Crystal Display.

NIBA: Northern Ireland Birdwatchers' Association.

WP: Western Palearctic.

WWR: Wexford Wildfowl Reserve.

WWT: Wildfowl and Wetlands Trust.