Dawlish Warren

2016 Ring Recovery Report

Lee Collins

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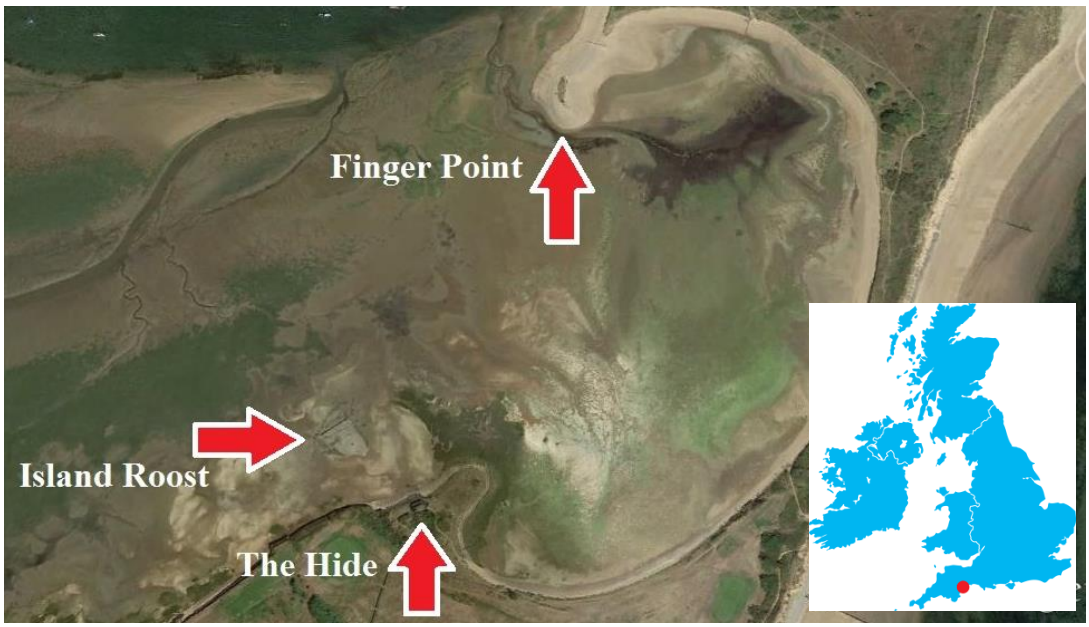
Here at Dawlish Warren NNR, the recording of ringed birds has become an integral part of my itinerary during my frequent visits and many will be aware of the annual reports I have written on this topic since 2013.

“How’s the ring reading going?” or words to that effect are a phrase I’ve frequently been asked during 2016 by many visitors. It therefore indicates my commitment in doing this and publicising my efforts are reaching a broader audience. One of my goals from the outset was to highlight and promote this aspect of birding. Many are fascinated by the results but appear unwilling to actively engage in this themselves.

Why do I undertake seeking out and reading ringed birds is a question I’ve never been asked but one which is worthy of exploring. Birding has many facets, defining a good days birding will lead to a multitude of answers, some are driven by twitching rarities, be it local or national. Nowadays more and more birders are armed with cameras and as such acquiring a decent image fuels their birding requirements. I‘m drawn to neither twitching or particularly focused on photographic pursuits, although I do occasionally take the odd picture. I am a patch birder, having birded Dawlish Warren since 1984. I bird nowhere else and over the years the emphasis has always been on finding my own birds. There is no better feeling than finding something either scarce or rare. Many that have found a rarity will have experienced similar feelings, although these situations don’t occur as often as I would like. I spend hundreds of hours annually onsite in this pursuit, often fruitless although never wasted. Finding good birds is a percentage game, the more hours you spend looking for them increases your chances of finding one. To supplement my time onsite I’ve always had the mindset of getting something out of the day. I’ve never been captivated by diversifying into other taxa such as plants, butterflies, other insects or fungi so have instead chosen to use my time in seeking out ringed birds.



Dawlish Warren NNR caters for this very well. The hide’s excellent placement plays an invaluable role in undertaking this, as without it the vast majority of my work in this field would be unachieveable. We’re also fortunate in that we have good numbers of birds present all year round. Both are key ingredients and by recognising this fact, I have found it offers me ample opportunities to enlighten my time onsite plus provides me with additional focus and ambition to fuel my frequent visitations.

I am also drawn to this by the simple fact it's something nobody undertakes with great seriousness within Devon. By being different, by not conforming to the norm, this has its own appeal for me. I'm not driven by listing in the context of British or Devon lists as so many prescribe to. I'm driven by different goals, one that is a bit more specialised, where few venture.

To many, a gull is just a gull, likewise an abundant wader species just another wader, be it an Oystercatcher, Ringed Plover, Curlew or Sanderling. Through my eyes by applying a marked ring to any bird it then acquires an identity. Finding a ringed bird is not as difficult as one would think. It's certainly much easier than finding a rarity. For me, when finding one and gaining a positive read it also brings with it a certain thrill and satisfaction. It has opened my eyes to a whole new world of birding and has had the added benefit that I pay a lot more attention to looking more closely at the more common birds, something many birders are perhaps guilty of not doing. By recording my observations I now have a much more rich and profound knowledge on the more common species we regularly see onsite, whilst at the same time adding genuine scientific knowledge on bird movement, site fidelity and longevity.

Great Black-backed Gull, Dawlish Warren, 19th July 2016, Lee Collins

My list of onsite recoveries pre-2016 stood at 1155 positive field reads, quite a haul. This relates to 501 individuals and 27 different species, my first being a darvic ringed Mediterranean Gull back in 2002.

Before I start documenting 2016 I wanted to quickly retouch upon my efforts over 2015. I'd make 432 reads involving 221 different individuals. It was a mammoth effort, something I am justifiably proud of and the rewards certainly warranted such involvement. A full account of it along with the 2013 and 2014 reports can be found at http://dawlishwarren.blogspot.co.uk/

Let's start looking at 2016. I'd visit the site 228 times over 191 days, recording over 1,067 hours coverage. To give this some balance that's almost 25% of all daylight hours per annum. A great deal of

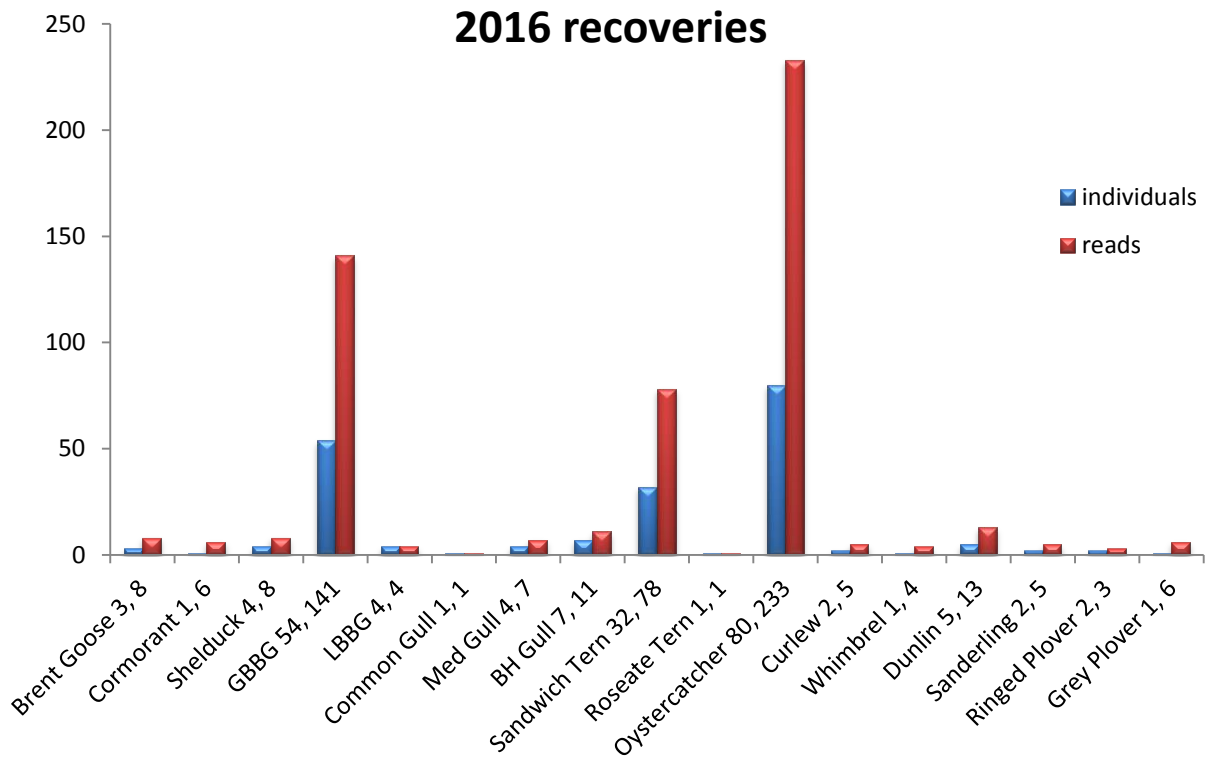
emphasis was taken to working the high tides, covering 195 in total. Any such tidal coverage offered potential opportunities, although neap or particularly low high tides often drew a blank. My rewards for sheer effort and dogged determination would yield a total of **534** positive reads, involving 16 different species. It would comprise **204** different individuals, 102 of which were new.

These facts clearly imply that a great deal of emphasis was taken to finding ringed birds and acquiring their reads and it is my wish to expand in greater detail on the results. In many cases highlighting particularly interesting accounts, analysing and evaluating the results and in some cases drawing conclusions on what I've learnt.

Onsite recovery reads genuinely fascinate me, it's given me a far greater insight and acquired knowledge on many of the species that are regularly recorded onsite. The chart below is a breakdown from 2016. I've used a two column system, the first in blue, this representing the number of ringed individuals recorded. The second column in red depicts reads.

It's important to highlight both and in understanding the difference. Clarifying my definition on 'reads' is straight-forward. It's acquired by making multiple observations on differing dates of the same bird(s). The benefits of this are of course important, both from a personal level but also scientifically, categorically allowing us a greater understanding on an individuals duration of stay.

My Oystercatcher recovery work is done under a different context, these overwinter and my reasons for engaging in studying this species is drawn primarily towards assessing longevity.



At first glance it's immediately apparent that three species dominate proceedings, Oystercatchers, Great Black-backed Gulls and to a lesser extent my early autumn efforts at studying Sandwich Terns. Both Oystercatcher and Great Black-backed Gull reads may seem dull, unrewarding or possibly pointless

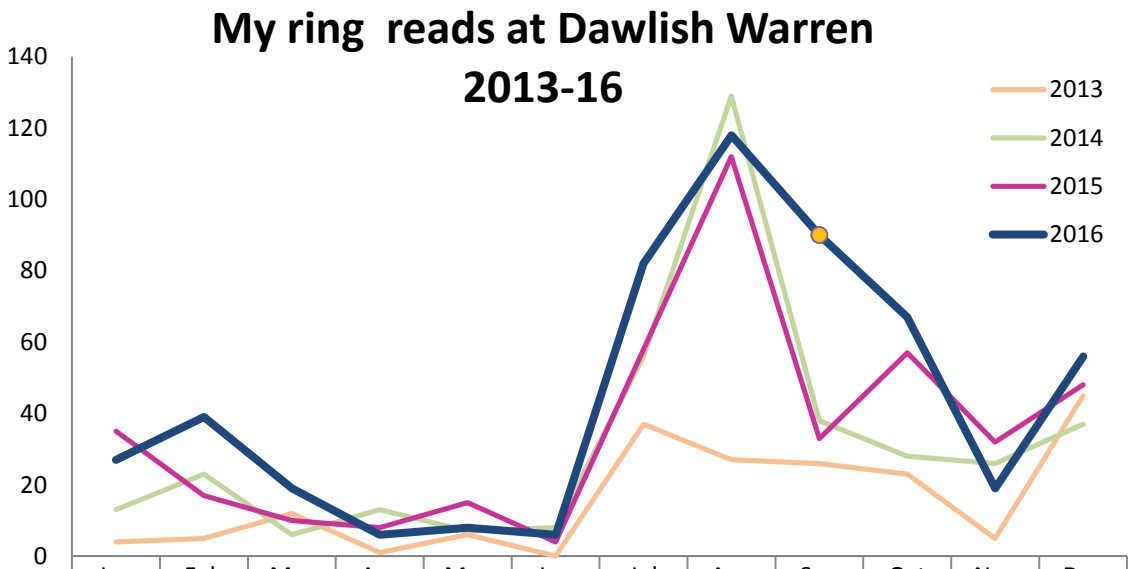
to many, but I would refute this and great effort has been taken later in the report to bring to people's attention just what can be learnt by studying them.

Thirteen other species were recorded, albeit in far smaller numbers. Although the chart doesn't visually make an impressive, eyecatching spectacle for these particular species all are invaluable and greatfully appreciated by myself.

One point that must be highlighted is that all are field reads, none are retraps as we don't undertake any ringing onsite, therefore show a complete bias towards Gulls, Waders and Terns.

The database I currently hold has almost two thousand recoveries, all of which are supplied to the BTO and where relevant with other international ringing schemes. Such a substantial collection of acquired current and historic recoveries is undoubtedly impressive, although my overall aim is not just to stockpile as many recoveries as possible. I want to use the data, to better understand many different facets, be it about a particular species migratory behaviour, longevity or a topic I'm particularly fascinated about, site fidelity.

Looking at a breakdown of recoveries in the context of the calendar year is one beneficial exercise and the graph demonstrates the usefulness of evaluating the core data.



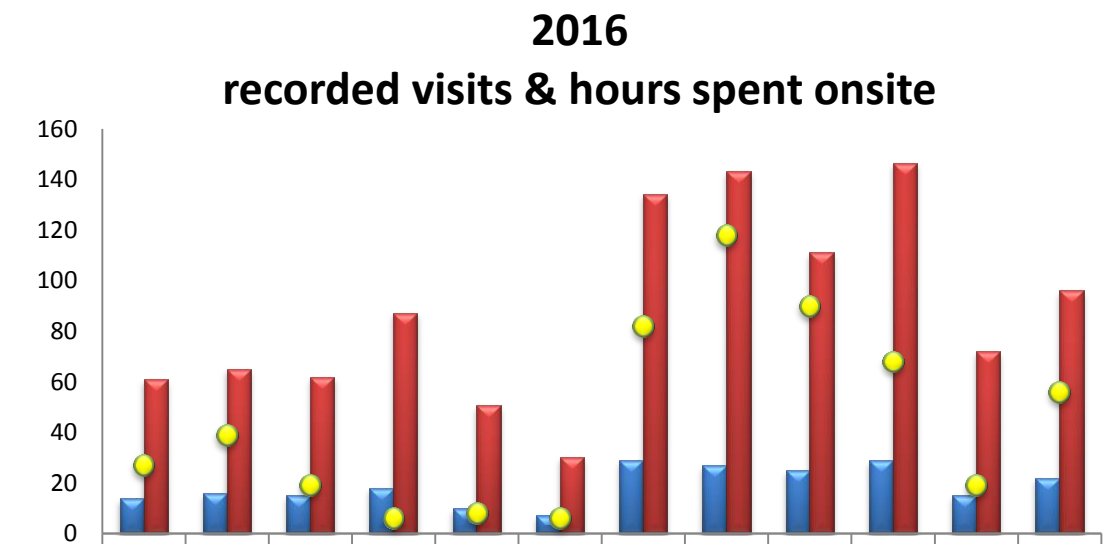
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	4	5	12	1	6	0	37	27	26	23	5	45
2014	13	23	6	13	7	8	56	129	38	28	26	37
2015	35	17	10	8	15	4	58	112	33	57	32	48
2016	27	39	19	6	8	6	82	118	90	67	19	56

My reads over 2016 are depicted by the blue line yet by plotting additional results from the previous three years it does suggest a clear pattern emerging and establish some degree of consistancy in the context of my recovery work. By recognising and understanding this annual correlation is undoubtedly beneficial and it's undeniable that the months of July and August show a dramatic upsurge. Post breeding dispersal plays a key role in this.

Sandwich Terns are the predominant species concerned and account for a vast percentage of my recovery work but not all as I've had limited success with Common, Little and Roseate too. My focus is not solely attributed to these alone but also on the influx of small Gulls that also frequent the area during this period, whilst also paying close attention to the small waders, in which I've had some degree of success, most notably with Ringed Plovers over the last few years.

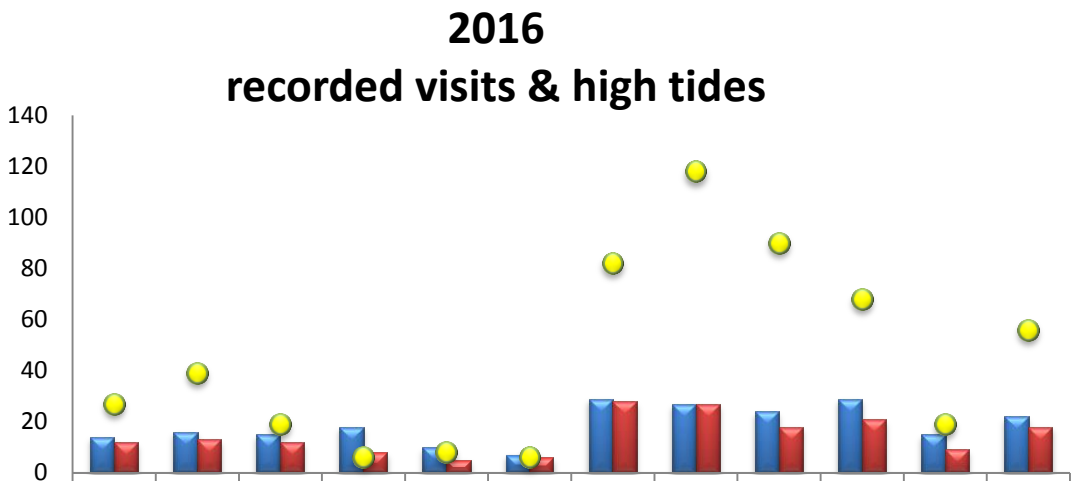
The one month that does stand out is the month of September (yellow dot), it being a particularly prolific month. I'd record a substantial rise on previous years of almost 200% and this anomaly was intriguing. Oystercatchers and Great Black-backed Gulls recoveries dominated proceedings during the month, greatly exceeding previous September's but why the dramatic increase? No doubt an increase in visits (up +66%) and hours onsite (up +50%) compared to 2015 would play its part, although statistically there was still an imbalance. I'm unable to quantify a specific reason, ruling out personal effort or unsettled weather patterns. The graph supports the theory of general consistancy in regards effort, whilst a run of mild, settled weather as noted should have been more inclined to have seen a reduction in my Gull recovery work.

The graph below is focused solely on 2016. It's intention to evaluate via a monthly breakdown the results of my positive reads in conjuncture to the amount of visitations and hours spent onsite. It's a useful exercise in its own right but further enhanced as it allows me direct comparison to my efforts and results over 2015 using exactly the same recording criteria (read/ visits/ hours onsite).



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
visits	14	16	15	18	10	7	29	27	25	29	15	22
hours	61.10	65.20	62.00	87.30	50.55	30.35	134.30	143.40	111.20	146.50	72.00	96.15
reads	27	39	19	6	8	6	82	118	90	68	19	56

The table below although similar has seen me removed the hours and replace it with high tide visitations. This perhaps gives a clearer insight into my success rates, although even this is open to misinterpretation as it covers all high tide visitations, be they neap right through to very large tides. Due to the flat nature of the bight particularly low high tides often prevented birds coming close enough to even contemplate engaging in such activities.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
visits	14	16	15	18	10	7	29	27	24	29	15	22
High tides	12	13	12	8	5	6	28	27	18	21	9	18
reads	27	39	19	6	8	6	82	118	90	68	19	56

Statistics can and do make useful ways of analysing data, the table below has also been reused from the 2015 report. It's been amended slightly to now include high tide vistitations and by this I define as such tides that offer me opportunities to engage in reads, thus have omitted neap or particularly low high tides.

2016's figures are quoted in black and where available 2015's figures displayed in grey, this allowing me to analyse comparisons and evaluate too some degree my efforts versus rewards on a month by month basis over the last two years. The results statistically corroborate that in practically every month over 2016 I'd a better return on my efforts in comparison to 2015.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Reads: vists ratio	1.9 reads per visit 2.0	2.44 1.06	1.26 0.59	0.33 0.25	0.8 0.45	0.86 0.31	2.83 2.15	4.37 3.86	3.6 2.2	2.34 3.56	1.27 3.1	2.55 2.81
Reads: hours ratio	1 per 2hr:22 mins 2:45	1:40 3:49	3:26 7:46	14:58 17:18	6:36 9:52	5:09 13:22	1:38 2:05	1:13 1:23	1:14 2:17	2:09 1:31	3:47 1:30	1:43 1:42
Reads: High Tides	2.25 per H/T	3.0	1.58	0.75	1.6 0.5	1.0 0.36	2.93 2.32	4.37 4.15	5.0 2.35	3.24 4.38	2.11 3.20	3.11

I'd now like to focus my attention on documenting my recoveries on a species by species basis and will start by looking at my most recorded and arguably most important work, that of the Oystercatcher.

Oystercatcher

Oystercatchers are unquestionably one of the most eye-catching waders in the UK, their immaculate pied plumage accompanied with bright orange bill make them a distinctive species.

Oystercatchers, Dawlish Warren, Lee Collins

Anybody visiting Dawlish Warren over any given high tide won't help but notice that we have significant numbers that overwinter. Comments regarding the impressive sight of such a large gathering are from personal experience generally made from people either visiting with a casual interest in birds or just out exploring the area. Due to its common status and sheer abundance the more seasoned birders who visit give this species little attention, choosing to focus their attentions elsewhere.

High tide gathering in front the hide 11th December 2016. Lee Collins
Such gatherings are not as common as in previous years due to them now favouring Finger Point.

What everybody fails to notice is that a healthy percentage are ringed, thus offering some of the most invaluable opportunities in the whole of the UK in which to study this species at a key wintering site. Ring reading is an aspect of birdwatching that unfortunately doesn't have many willing participants, even fewer who attempt in trying to read metal rings. I enjoy the challenge, although I'm in the minority and to some degree I can understand this. It both captivates and at times frustrates me (*gaining a unsuccessful partial read on a metal ring is an all to frequent occurance, although a tolerated consequence of undertaking such a challenging task).*

Over the last 50 years the lower Exe Estuary has played an important role in Oystercatcher research. During this period several thousand birds were captured and ringed, although the programme ceased back in 2004. I'm only aware of a few ringing scheme in the UK that are currently ringing this species. One is based around Aberdeenshire where they're applying yellow coded darvic rings, one of which winters annually here at Dawlish Warren.

Therefore here at the Warren we can play an important and significant role in gathering vital data. We're in a unique situation in that our wintering population holds a large collection of historically ringed individuals. By gaining positive reads of these birds we're helping build a better understanding on the species longevity. Nationally it's now amber listed and therefore my work in this field does have genuine scientific merit.

Over the past four years I have ploughed a fairly lone furrow in acquiring such reads. My efforts and ensuing results have been well received by many including the BTO and have encouraged a few regulars to give it a try. Gaining a full read of all seven digits is not an easy pursuit, but likewise not impossible. Many locally ringed individuals were also fitted with additional 'wasp' rings, which I discuss in more detail later. I'll often be found sat patiently in the hide over the high tide roost, when birds can congregate in very close proximaty too the hide, scope focused intently at the gathering, quietly recording ring numbers.

My commitment to watching and recording this species continues to grow year upon year. From my first exploratory efforts as recently as 2013, in which I made 38 reads, increasing markedly to 89 during 2014 and rising significantly once again in 2015 to 148. My 2015 report is worth reviewing as I went into a great deal of statistical analysis, which I have omitted from this report to avoid repetition.

For the second consecutive year this was my most recorded species, accounting for 43.6% of all my reads during 2016. In doing so I'd accomplish another 63.5% per annum increase, accumulating a total of **233** positive reads. This would comprise 80 different individuals, a similar return from the previous year, although I was pleased that this included an additional 19 new individuals. Unsurprisingly the majority of these, 13 were ringed onsite, (*<u>all</u> of which had never had a previous recovery anywhere prior to me recording them despite every bird ringed at least 12 years ago*) including one dating as far back as 1983. Four of the remaining new birds were ringed elsewhere in the UK, from the Axe Est, Lincs, Conwy and Scotland, while the remaining two constituted our first ever Icelandic ringed individuals onsite.

An overall review of the results during 2016 informs us:-

- My involvement has genuine scientific merit!
- The majority were acquired over 143 high tides visits between 1st January- 21st February and 17th July- 31st December

- Most rings read over a single tide =13 (in Dec)
- In October I achieved my highest ever monthly return with 44. I'd be present over 20 high tides although would only record reads over nine dates, averaging a mean read rate of 4.9 reads per day on successful visits.
- During six of the twelve months in 2016 I'd record my best read return for the respective months (Jan, Feb, Jul, Sep, Oct & Dec). May was the only month I'd not acquire a read.
- The two oldest birds encountered were ringed back in 1983, making both at least 33 years old.
- Exe ringed birds accounted for 82.5% (=66) of all birds positively identified
- Reads: 158 of the 233 or 67.8% were acquired on birds supporting an additional darvic (28) or wasp (130) ring. This would support the theory that I am twice as likely to identify an individual marked in this way, as opposed to one marked with just a metal ring. The wasp rings help both as a visual stimulus, but also when encountering one in many instances I only require a partial read of the last two or three digits of the metal ring to acquire a positive read. This is because I hold a copy of my database on my mobile phone, therefore can quickly cross reference any field read immediately. This saving me valuable time, allowing me to concentrate on other individuals.
- Three darvic ringed birds were recorded:- a Scottish bird (yellow T24) noted for the third consecutive year and two new Icelandic ringed birds (white JA and EA) over the second winter period. A combined total of reads acquired on these individuals was 28.
- By excluding these 28 sightings it would show the remaining **205** reads were acquired by gaining a positive read of the metal embossed BTO ring (or partial read accompanied by wasp read resulting in a positive outcome). This often requires patience and dedication, but proves that reading metal rings isn't impossible, a misconception expressed by many. Experience also helps, especially when encountering a Warren ringed bird(s) as I am familiar with the number sequences used.
- As far as I'm aware none of the birds recorded during this calender year, certainly none of the Exe ringed birds has any previous recovery history (anywhere), other than my own.
- **Longevity** is a key movitation in why I continue to monitor this species. A breakdown of the Exe ringed individuals shows 23 were ringed in 2004, 20 in 2000, one in 1998, 10 in 1997, the remaining 12, all being at least 22 years old or older were ringed between 1983 and 1994.
- 41 of the 66 Exe ringed birds recorded were wasp ringed =62% (see below)
- 50 of the 80 identified were recorded more than once during 2016 =62.5%
- Multi-observational accounts: shows a strong bias towards birds supporting an additional wasp or darvic ring.
- The most recorded individual onsite was seen 17 times. It being a new bird supporting a coded white darvic ring, administered in Iceland in May 2016 (see below). With 75 high tide visits from the date initially found in late August to years end it highlights I only saw it on 22.7% of my visits. This indicates that although it was probably present on each high tide I'd visit it's not always recorded. Finding it within a 1,500-plus roost, often tightly bunched clearly highlights even clearly marked individuals more often than not go unseen.
- 25 individuals were recorded over both winter periods. This was 31% of the birds recorded over 2016. When you bear in mind their longevity and wintering site fidelity this figure although statistically correct is in fact wildly inaccurate. It only takes into account of birds I've recorded and once again highlights the fact individuals do go unrecorded despite my best efforts. A breakdown of these shows a great majority were locally ringed, 16 being wasp

ringed, four purely metal ringed. The remaining birds were ringed offsite, a yellow Scottish darvic ringed bird and four metal ringed birds, two of which are Scottish ringed immatures.

- Wintering site fidelity is well known fact. The majority present spend approximately eight months of the year onsite, every year. Surprisingly just six birds from the 135 I've positively identified (= 4.4%) have been recorded every year between 2013/16. This low recovery rate another clear indicator that the majority of ringed birds onsite do go unrecorded despite being present. Individuals recorded over three of the last four years increases dramatically to 26 (19.2%).
- The statistical breakdown mentioned above although factually correct based on my 135 identified birds maybe a misconstrued. In 2013, my first year in studying them yielded my lowest yearly return, recording 32 individuals. Six of these I've recorded every year since, this would indicate an increased ratio of 18.7%. On the flip side, seven of the birds noted during 2013 have not been recorded since. What has become of them? Have they somehow avoided my attention over the intervening three year period or succumbed to mortlity? If the latter, could such findings be used to formulate some degree of annual mortality rate? Moribund observations are somewhat scarce onsite, despite the large gatherings we record. I'd quantify less than one per annum are found. Carrion Crow and Peregrine Falcon harrassment is recorded during the high tide roost although this rarely leads to actual predation.
- I'd also acquire 25 unsuccessful partial reads of individuals not held on my database. These are held on file, as there is a strong possibility these may be seen again at a later date
- A change in the behavioural roosting habits continues. Birds now generally favour Finger Point over the conventional roost. This is having a huge detrimental effect on my ability to acquire reads. This seems an odd statement to make bearing in mind I'd make 233 reads onsite this year.

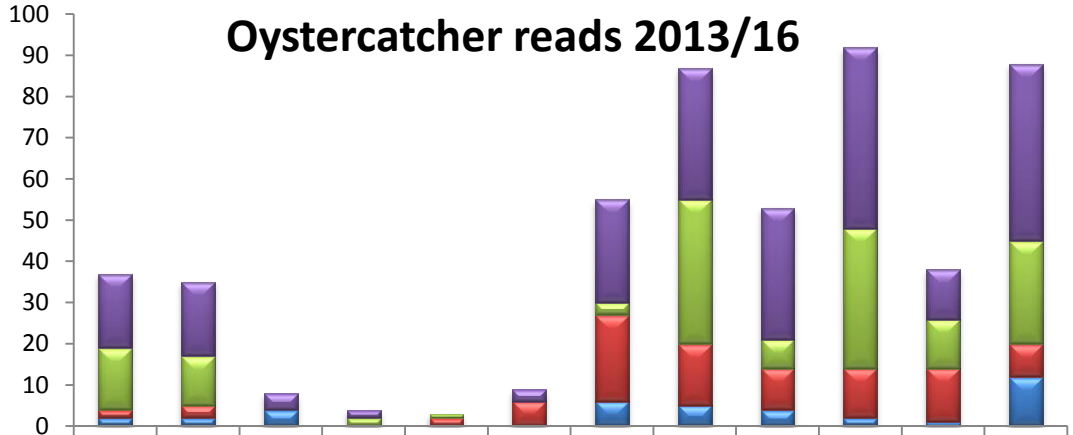
To put my ring reading results into a broader context, another Warren patch birder Ivan Lakin has undertaken dozens of high tide counts this year. Counting them onsite isn't an easy proposition, they generally roost in tight gatherings, often partially obscurred around Finger Point. Over both winter periods we'd approximately 1500 birds and therefore the percentage of ringed individuals based on my successful reads this year would indicate that at least 5% are ringed. What's worth reiterating is that 82.5% of the ringed birds found onsite this year were Exe ringed. Therefore the vast majority of birds I recorded are at least 12 years old, with my two oldest ringed back in 1983.

The database I hold shows that I have now positively identified 135 different birds over the last four years. This figure, acquired over a relatively short period of time based on the species longevity does underscore the 5% statistic quoted above, implying a figure nearer to 9%, although mortality and the fact I know I didn't read ever ringed bird present onsite during 2016 does ensure some margin of uncertainty.

What can't be in question is that in recording so many different individuals over the last four years has been eye-opening as well as extremely rewarding. Its been hugely time consuming yet time well spent as its providing invaluable scientific data on both a local and national level.

Finding a new marked bird is starting to become increasingly more difficult, but my continued involvement in doing this is not purely focused towards this goal alone. Knowledge regarding their longevity plays a significant role in my participation. My monitoring and recording of these marked

individuals year on year is an equally important undertaking. With continued involvement planned in future years this should lead to an unprecedented account of records, allowing evaluation on their longevity and should prove useful to help assist on the species status on the Exe.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2016	18	18	4	2	0	3	25	32	32	44	12	43
2015	15	12	0	2	1	0	3	35	7	34	12	25
2014	2	3	0	0	2	6	21	15	10	12	13	8
2013	2	2	4	0	0	0	6	5	4	2	1	12

This graph has been drawn up to show all the reads I've acquired over the last four years. In total I've now successfully amassed **510** positive reads. It indicates that reads are possible throughout the calendar year, although during March through to June these drop off significantly. The vast majority of my recoveries relate to adult birds and these migrate to breeding grounds during this period. The birds that remain have yet to reach sexual maturity and virtually all of these are unringed.

A significant percentage of my reads are predominantly acquired between July through to October (and December). This is not coincidental, as during July and August I do like to pay some attention to the growing influx, as birds return from their breeding grounds. It's a useful undertaking, with two core reasons for doing so. The first and most obvious is too document individuals that have successfully returned having undertaken the rigours of migration, many having travelled hundreds of miles, indeed up to 1,800 if arriving from Iceland. The second and equally important task is the timings, my first returning wasp ringed bird was noted on the 17th July and a steady increase of other such ringed individuals arrived within days of this. Such a structured arrival has me leaning towards a more migratory pattern rather than early returning failed breeders.

Additional recovery data on where they have bred or noted during migration is sadly unknown. A lack of recoveries away from site over the last few years reaffirms a general unwillingness of the birding community to engage in this aspect of birding. But I do hold a dataset of over 200 documented historic recoveries of Exe ringed birds recorded offsite. Such data gives us greater insight and undeniable proof our birds migrate great distances to breed. Many were recorded in Scotland, with numerous others from the Faroes and Iceland to the north, while we've also good numbers travelling in a more easterly route to west Norway. Our greatest travelled recovery was made in 1998, when one found dead in Greenland, some 2840kms away.

Wasp rings explained

Below is a montarge of cropped photographs of wasp rings taken during 2016. These were applied by the Devon & Cornwall Wader Group at Dawlish Warren during the late 90's through to 2004. They incorporate a three banding system, denoting either a wide (W), narrow (N) or blank (B) band to the top, middle and bottom of each ring. My understanding is their placement allowed such individuals to be studied around the Exe Estuary into learning more about their feeding behaviour/ territories.

			
Green-**WBN**	White- **BNB**	White- **WNN**	Green- **NNB**
			
White- **BBB**	White- **NBN**	White- **WNB**	Green- **WNB**

As you'll see from these pictures many now show signs of wear, some significant after 12 or more years of placement (*picture seven looking almost entirely black now, whilst number eight has a chunk missing from the top of the ring*), others also support an additional colour band (*picture four*). Any such bird harbouring one of these *wasps* denotes a bird ringed on the Exe. Unlike newer style darvic rings, these wasp rings aren't unique and therefore any such read of a wasp alone won't identify it to a specific individual, to do this you'll also need to acquire a positive read of the metal BTO ring. Due to my ongoing involvement in studying them the distinct wear patterns on many of the wasp rings are now so unique its had the benefit that I'm now able to confidently identify an individual on the wasp observation alone in several instances.

Individuals ringed away from the Exe Estuary

I've many recoveries of non-Exe ringed birds onsite. Practically all accountable as metal ring reads of British ringed individuals. Overseas ringed birds are scarce, therefore welcomed and the bird pictured below is no exception. Found on the evening of the 28th August it had both a coded white darvic ring (JA) and additional colour rings on the other leg (red over green). This individual would constitute our first ever (and eagerly anticipated) Icelandic ringed bird.

JA was ringed on the 11th May 2016 in Fljótshlíð, Hlíðarendakot, SW Iceland and this well marked bird would overwinter, recorded by myself a further 16 times during 2016. A similarly marked second individual, this one captured whilst incubating in Hvalfjörður, Miðsandur, Iceland on the 4th June 2016 was found on the 4th November. Noting its presence daily thereafter seemed to reaffirm this bird too would overwinter so was somewhat surprised not to record it again after the 7th. This had me baffled, was this behaviour suggestive it was merely a passage stopover rather than a wintering individual? the

late date perhaps counteracts this theory.The only other rationale explanation leads me to conclude it may have fallen prey to predation or other means leading to mortality.

Oystercatcher, Dawlish Warren, 28th August 2016, Lee Collins

The scheme in Iceland is of particular interest to me. It's a fascinating study programme, one I will continue to monitor. Since 2013 they'd colour-ringed 569 birds, in 2016 capturing 382 birds (159 adults and 223 chicks) although not every bird was colour-ringed, particularly juveniles, many being too small to administer the colour rings. Graham Appleton has posted an interesting online article https://wadertales.wordpress.com/2015/10/02/migratory-decisions-for-icelandic-oystercatchers-2/

He describes in great detail the migratory decisions of Icelandic Oystercatchers. It's a fascinating article, giving great insight into a combined project involving Universities from Iceland, the UK and Portugal. It bought to my attention how climate changes and individual behaviour are now witnessing birds that remain in Iceland over the winter, 'toughening it out'. In doing so they'll endure reduced daylight feeding hours although in doing so perhaps gain a competitive advantage in choosing territories, perhaps allowing an earlier start to breeding and avoiding the long trans-atlantic flights that the migratory birds endure. The schemes aim is to learn more about the changes being witnessed and to try to tackle questions such as: why do some migrate and others don't; is it the same birds each year; do resident birds have a competitive advantage in choosing their territories and rasing chicks; and do the young follow the same migratory traits as their parents.

Such a shift in behaviour could in the longer term make a significant difference in our wintering numbers here at Dawlish Warren.

Ringed Plover

Two ringed individuals were found and successfully acquired during 2016. This figure was well down on the seven noted the previous year. So if basing my results on numbers alone it would constitute a poor return, although this doesn't tell the full story, far from it.

My first, noted on the 30th May was my first ever spring find, it having a yellow coded flag and was another from Makkevika, Norway. This now my fifth bird from this scheme over the last 18 months. My sighting was the first recovery since the rings were applied in September 2015.

My second bird was recorded on the 19th August during a scan of the Bight. Mid to late August is a key time onsite for this species, as numbers swell significantly, most years reaching the nationally important figure of 340.

It was clearly colour ringed yet on closer inspection I was thrilled to discover it also had a geolocator fitted to it's right tibia. This was exciting, as I'd no knowledge of such a scheme using these on Ringed Plover. This was further fuelled when a text from a desk bound Kevin Rylands at work informed me I had probably discovered a Canadian ringed bird, WOW! potentially my first ever transatlantic recovery.

E-mail communication to Don-Jean Leandri-Breton, the Canadian Co-ordinator confirmed Kevin's suspicions. I'd found one of his Canadian ringed birds. This alone was incredible news, just the fifth European recovery from this scheme and only the third in Britain.

Don-Jean was equally delighted and was also able to furnish me with a great deal of outstanding information on the bird in question. It was a male, which had been caught whilst incubating (the eggs hatched two days later) at Bylot Island on the 8th July 2016. This just 42 days prior to it's discovery at Dawlish Warren. I'd never heard of Bylot Island, which I discovered was part of the Baffin Islands, which lie off the north east coast of Canada.

Ringed Plover, Dawlish Warren, 20th August 2016, Lee Collins

It had undergone a remarkable and lengthy journey and without recovering the geolocator we'll never know the true extent of the route it took or actual time taken. At present, we can only surmise that if it was successful in rearing its young until fledged, this would have ensured it remained at Bylot approximately another 24 days, thus making the migratory journey even more noteworthy. We must also bear in mind the magnitude of the distance covered, at least 4,200km and legislate for the fact it probably didn't make this in a single journey, having more than likely stopped enroute possibly in Greenland or Iceland.

Nesting area, Dufour River, Bylot Island

The actual nest and eggs it was incubating

Dunlin

To whose familiar with Dawlish Warren it's of no surprise that this species is an abundant winter visitor. Counts can vary immensely and during the first winter period the maximum count I made was c.2180. Finding a ringed bird within such large gatherings isn't as difficult as many would think, although these relate to metal ringed individuals and are borderline impossible for me to acquire.

In Europe there are about a dozen schemes administering either uncoded colour rings or coded flags, whilst just one scheme uses a coded white darvic ring and it's these birds I've started to find. Locating one within a gathering of over a thousand wintering individuals, especially within a tightly bunched flock that roosts over the high tide remains somewhat a lottery. They're both easy to overlook and also if tucked within the flock impossible to observe. Finding any is a challenge, although this only the first hurdle. Gaining a successful read on such a tiny ring can be difficult to acquire.

This year would prove to be my most successful to date. It would see me record five different darvic ringed individuals, all of which were ringed from the same scheme in Ujscie Wisly, Swibno which lies at the mouth of the River Vistula in Poland.

As in previous years the months of February and March were particularly fruitful, just why they're confined to these months is somewhat baffling. The time of year is an awkward one to evaluate, it could refer to birds that have over wintered, which seems logical. Although without accounts of seeing them during the rest of the winter period this remains unsubstantiated and therefore could also indicate early migratory dispersal.

Dunlin, Dawlish Warren, 14th February 2016, Lee Collins

My first was found on the 14th February (remaining onsite until at least 11th March). Gaining the read was made without incident and on observing it the code LYM immediately struck a chord. It was the very same individual I'd recorded here eleven months prior during March 2015, when also noted over several visits. It being ringed in July 2014. This was my first ever documentary evidence of multi-year

wintering site fidelity for this species, a topic I'm fascinated about and prevalent in several other wading species onsite. Oystercatchers form my greatest account of this, although it's not solely attributed to just this species. We've also noted this, although in much smaller levels with Curlew, Grey Plover, Shelduck, Brent Goose, along with recent documentary proof of annual post breeding dispersal that include several species of small gulls and Sandwich Terns but never witnessed in Calidrids before.

As I alluded to earlier, prior to making this read we'd no documented onsite evidence of multi-year reads for this species. This primarily based on the fact that Dunlin recoveries are very scarce indeed despite an abundant wintering population onsite. Prior to finding this individual I'd never really given any thought towards wintering fidelity for Dunlins. With no core data (recoveries) to support this the matter hadn't even crossed my mind. But now faced with this latest discovery the subject began ruminating in my mind and I began to reflect further on this matter. With such a large wintering gathering it must be entirely feasible that some, indeed many do return each winter. It's perhaps a logical conclusion to draw, although without factual verification it's impossible to substantiate this, remaining wholely theoretical. Now we'd our first unequivocal evidence of this. Much like my work done with Sandwich Terns over 2015 we'd now acquired some new and invaluable site fidelity material. The BTO's Migration Atlas substantiates this, it stating '*Dunlins are highly site-faithful to their winter roost sites, both within and between years'*, alluding to evidence via recaptures from the Wash and the Moray Firth. It also stated '*There is remarkably little movement during the midwinter period'* and this would indicate that although LYM was first seen in mid- February it had probably been present onsite for several months but gone unnoticed.

My second bird was found on the 27th February. On initially finding it I'd assumed it to be another sighting of LYM, therefore was delighted when gaining the read found it wasn't. Its code, ETA showed it was ringed in July 2015 and much like LYM this individual also lingered, probably remaining present until the 14th March. Something also struck a chord about this bird and my mind quickly wandered back to an earlier account of what must have been the same bird on the 31st October 2015. On that date I hadn't secured a full read, although mooted the first two digits to be 'ET'. This bird must have over wintered yet gone unobserved over the intervening three month period.

Buoyed by these finds over such a short period of time had me paying particular attention to the Dunlin's thereafter. My thought process was to give some indication just how long they'd stay before departing to breeding grounds. On the 14th March whilst scanning a flock on the island in front the hide I observed a darvic ringed bird and was delighted to discover it was another new individual, making this my third in just a matter of a few weeks. This bird, S55 was ringed several years earlier, it captured on the 14th July 2011. Despite it being ringed almost four years ago it also had no recovery history.

My fourth bird, 1YE would constitute my first ever autumn recovery and was found on the 31st August by Dean Hall. He's shown a particular interest in pursuing in similar path as myself in looking for ringed birds. I caught up with it on the 2nd September, making additional observations on the 3rd and 4th.

Autumn discoveries clearly allude to migratory individuals and such finds bring a whole new set of dynamics into play. Its recorded stay of at least five days gave us a clearer understanding on migratory behaviour. By being able to identify unequivocally a particular individual we're able to see there's some evidence that passage birds will linger several days before continuing onwards.

Dunlin, Dawlish Warren, 3rd September 2016, Lee Collins

Processing delays in Poland would ensure a long wait for news and in January 2017 the wait was finally over. Belated news was nevertheless exciting, as I was to discover the bird was ringed on the 19th August 2016, this just 12 days prior to Dean finding it. In migratory terms a recovery of 1500km during 12 days isn't unique, however for me this was enthralling and constitutes my quickest ever recovery of a ringed bird.

My fifth find was found on the 16th December, surprisingly my first ever December Dunlin recovery. My expectations on first finding it had me leaning towards it being a returning individual recorded over the previous winters. This proved unfounded, it being another different bird (HCY). The timing of the discovery along with an additional sighting of it in early January 2017 undoubtedly pointed towards this bird wintering onsite. But much like previous sightings of similarly marked Dunlins had me quizically wondering just how long had it been present and gone unnoticed?

So on reflecting not just on this years results, but over the last three winters what have I learnt?

- ✓ Finding one isn't easy!
- ✓ Over the last two years I have found and read rings on five darvic ringed birds, hence some degree of success
- ✓ Hundreds of high tide visits during this period temper this, my success rate regards finds to visits is very low indeed
- ✓ The large winter gathering we hold should statistically through sheer volume increase the probabilty of ringed birds being present. Although to counteract that, experience has taught me finding one within a tightly bunched high tide roost gathering brings with it its own problems. It's harder to find a bird within a 1000+ flock than several dozen or a few hundred.
- ✓ Four were recorded during the winter period (December through to February)
- ✓ Disappointingly only one has been recorded during two winter periods. Wintering site fidelity is a well know fact, although I've personally very limited success in this respect.

- ✓ Although pleased with my results I'm left somewhat unsatisfied to some degree by nagging uncertainties, by which I allude to the fact I've no accounts of long-staying individuals. My wish is to find a bird late autumn, frequently record it over the winter period and note its presence into late February/ early March when many depart to breed.

There are several schemes throughout Europe that capture and apply either uncoded colour rings or to a lesser extent coded darvic rings to Dunlins. On the excellent cr-birding website it indicates that Greenland, Wales, Spain, Sweden, Ukraine, Belarus, Germany and Estonia all have coordinated projects. Just why I'm only finding Polish ringed individuals is puzzling and perhaps due in large part to the sheer scale of birds they've marked, which I understand was over 5,500 during 2016 and 16,000+ since 2010.

I've no such details on the number of birds ringed via the schemes listed above, but surely we've a reasonable chance in the future of finding others from Germany and perhaps Estonia based on the relative proximity to Poland. Sweden too must also rank as a strong possibility. Surely a large percentage of the alpina race that breed in northern Russia must migrate in large numbers through Scandinavia. Also what about Greenland? They too must come into the reckoning.

Sanderling

Unfortunately 2016 wouldn't reach the dizzy heights of 2015 when I'd record ten different individuals, although I'd be away during the key period of May helping with a bird tour to Canada.

I'm very much drawn to looking for colour-ringed Sanderlings, in no small part due to their incredible migratory journey's they undertake.

During 2016 some success was attained, recording two such individuals. The first found just a few days after my return from Canada on the 21 May. It was present just a single day and was an individual ringed at Asenko village in Ghana on the 10th September 2012. It had 23 previous resightings, this a good haul in Sanderling terms, although all were accountable from Ghana over three separate winter periods. This suggestive of wintering site fidelity.

Sanderling, Dawlish Warren, 28th August 2016, Lee Collins

My second was found on the 25th August and remained until the 30th. The bird (shown above) had four colour rings (yellow, yellow, blue, white) plus a geolocator on its left tibia. These administered at Ostgronland, Greenland on the 7th July 2015. My observation would be its first recorded resighting .

Its duration of its stay would prove interesting. The vast majority of the 31 positively marked birds that have now been recorded onsite generally stay just a day or two, its stay of six days represents by some margin our longest recorded duration of stay.

I've now personally found 24 colour ringed Sanderlings since my first in 2009. Five have been ringed in Greenland and seven in Ghana (this over 5000km away). Many of the others are also long distant recoveries, with seven from Mauritania and three from Iceland, whilst the remaining two from Portugal and England.

Grey Plover

This is an abundant winter visitor onsite, during recent winters counts of c.200 are generally observed.

Ringed individuals remain highly sought after. Back in the spring of 2014 I was fortunate to find my first, a colour ringed bird from Spain. In March 2015 I was even more delighted, when I found and read a metal ringed bird roosting in front of the hide. This individual, which was discussed in my 2015 report was from Norway, ringed back in 2006 and appeared to constitute the first UK recovery of a Norwegian ringed Grey Plover.

Despite keeping a close eye out for it during the second winter period of 2015 I drew a blank. Although in early January 2016 I tentatively assumed I'd refound it. A metal ringed individual was present and frequently encountered roosting on Wood Henge, in front of the hide. At such a distance my ability optically to acquire a read is just on the very limit of my range and during several visits partial reads had me leaning towards it being the same bird. On the 29th January I finally got an acceptable read and could finally confirm it was indeed the very same individual. Several partial reads during February confirmed the bird remained in situ and the bird was last recorded on the 13th March.

Sadly it was not recorded over the second winter period.

Great Black-backed Gull

This species remains a major contributor in the context of my recovery work. They generally congregate on Finger Point over the high tide, sometimes in very large numbers. The autumn remains the key period in this aspect although observations can be made any month of the year. Bouts of unsettled weather will drive foraging birds ashore and it's at these times I've recorded good numbers of ringed individuals.

Gull gatherings, indeed Gull watching isn't everybody's cup of tea, yet at the Warren they are keenly looked through and frequently reward us with ringed individuals. Reads are a comparitively easy venture for those willing to undertake this task of systematically looking through the entire flock. Finding a bird supporting a coded darvic ring isn't hard to discover and within gatherings that reach treble figures I would realistically expect to find at least three although on several occasions have read seven or eight on particularly productive visits. The ring itself is 34mm long and measuring the one I have in my possession each digit is 14mm in height. These sizes may seem small, but to give some

perspective of their readability I am able to read these rings on birds roosting on Finger Point from the hide, which I believe to be c.110 yards away!

The application of these plastic coded rings is not new although have only been used within the last decade. It's had a phenomenal impact on the recovery process, allowing identifying individually marked birds in the field a genuinely straightforward affair. To show the undoubted success of their application, prior to using them the BTO's Migration Atlas published in 2002 states that the 'finding circumstances' were heavily attributed towards dead birds, quoted at 97.1%, with just **2.1**% as resightings, the remaining 0.8% as recaptures. I don't possess data on recent national recoveries although on a personal level I've made 528 reads onsite and just one relates to a dead bird. Therefore my find rate of resighting stands at **99.8%**. Such a shift change over the last decade or so in resighting recoveries has no doubt proved a huge success, providing invaluable and increased data to organisations such as the BTO.

Just occasionally birds will gather in front of the hide thus allowing some photographic opportunities. Here's a picture of one such bird with black darvic ring, perhaps not the most eye-catching colour, but for those willing to look for individuals supporting a ring it really stands out. Other base colours used are numerous and from personal experience of birds recorded at Dawlish Warren, white rings are from the UK (Portland and Looe), Black (France and Norway), Green (France), Blue (France), Yellow (Channel Islands and Wales), Orange (France). Other schemes do use similar colours, but I've only quoted information based on onsite recoveries.

Great Black-backed Gull (JU444), Dawlish Warren, 24th September 2016, Lee Collins

A vast majority of the birds found onsite have been ringed within a 280 km radius. Most are ringed as pulli from local schemes at Portland Harbour, Dorset (71km east) or Looe Island in Cornwall (78kms

southwest), while other Channel based schemes in the Channel Islands (c.150kms south) and three projects in northern France are also regularly observed onsite. The bird pictured above (JU444) isn't from any of these but ringed in Norway at Mandal, Vest- Agder. This one of a handful of individuals we've noted onsite that have been ringed in Scandinavia.

During 2016 I'd record a total of 54 different individuals (cf. 61 in 2015), 30 of which were new to the recording area. I'd acquire 141 reads, a notable increase on 2015 inspite of encountering fewer individuals. This now takes my overall tally of ringed birds successfully read onsite to 209 individuals, since my first found in August 2009.

Although 2016 wasn't a particularly fruitful year, probably a consequence of witnessing a sustained period of mild, settled weather throughout the late autumn and second winter, recoveries were still forthcoming.

Each observation is of course greatly appreciated by the people that administer the rings, as well as useful to the BTO and other international ornithological societies in helping build a better understanding on the species well-being, movements and longevity.

On a more personal level it's allowed an insight into learning more about this species, although must confess the core dataset of information I hold is not an easy one to fathom, with anomalies a plenty, which I am keen to explore.

Of the 209 individuals now observed, 33 or 15.8% have only been recorded onsite once. This figure surprised me, as I thought it would be much higher than that, which I will touch upon later. In complete contrast, if we evaluate individuals with sighting of 10 or more observations onsite we have a much smaller figure, with just eight (=3.8%). Each of these eight individuals have been recorded over more than one calendar year, with five noted over three or more years, proving some individuals do maintain some degree of site reliance. What really stands out is that three of these are Norwegian-ringed. I've personally recorded twelve Norwegian birds from the 209 found, a percentage of just over 5% yet three of the eight or 37.5% of the individuals showing site fidelity are Norwegian. This is a disparaging difference that I was curious to explore in more detail. Does this point towards or indicate a differing behavioural pattern between the birds from the more temporate western breed population and the eastern population from Scandinavia?

Clinal Behavioural Variation between Eastern and Western Popuations?

Western (local) population

The marked birds we note onsite have been ringed in Cornwall, Dorset, the Channel Islands and northern France. These in the main appear to show no real localised affiliation. A high percentage of the birds that I record (but not all) don't linger, thus give me the impression they casually roam the English Channel. Their movements based on previous resighting histories from many individuals suggest they come ashore anywhere along the southwest coastline of England as well as the Channel Islands and French coastline. Very few have been recorded east of Dorset or discovered west of France in Spain, but does that imply they don't venture to either or maybe highlight both area's have few birders actually interested in recording ringed birds?

Resighting accounts are of great interest and four things seem a common denominator-

- The same sites (and observer names) appear time and time again, which informs me that very few people are looking for, finding and recording such birds.
- Much like my Warren observations, most sites don't appear to record birds that linger or show any fidelity to a particular area.
- Many ringed individuals can go long periods of time without being recorded.
- No western ringed bird I have recorded has ever been seen in Scandinavia

The Migratory Atlas published in 2002 gives several references to the western population having a somewhat sedentary lifestyle, something I am not 100% convinced by. I am not one for challenging people with a much greater authority than my own, but how do they constitute sedentary?

Based on the number of birds I've recorded onsite many have been ringed in northern France (=35%), some 220kms away. Does such displacement conform to a sedentary lifestyle? Reference material implies immatures display a greater tendancy to travel further than sexually mature adults. I assume recently fledged birds display no territorial tendencies at such a young age towards natal sites or maybe driven out by the more dominant adults. In doing so they display a more nomadic lifestyle, venturing forth, looking to survive into adulthood to seek new territory or perhaps return years later to vie for the right to breed back back to their natal colonies.

By focusing solely on all recoveries I've made of French-ringed birds, statistically 20% were adults, all ringed between mid- May through to late June at known, active breeding sites. Of these we see an even split between birds ringed as pulli (nestlings) and adults. It's the adults which interest me most, as although all are noted between August and December it does imply many choose to venture far from breeding sites outside of the breeding season.

Eastern variants

Visually its impossible to identify an eastern individual. Therefore a direct consequence of my efforts in acquiring ring reads over the last seven years or so has been to definitively affirm that we do see birds onsite that have been ringed in north and west Norway. These appear to display a much greater structured behaviour pattern. Their movements between summering breeding grounds and wintering quarters based on personal recoveries suggest a journey in excess of 1000 kms. By adopting this migratory behaviour it would make sense that little is left to chance and so it would appear many display some affiliation in their choice of wintering grounds. My core sample of recoveries although small strongly support this

Whats equally fascinating about these Scandinavian individuals is that two of the three I mention have an interesting recovery history. Catagorically proving birds do migrate large distances, travelling between Dawlish Warren and summering back in Norway. We're not just talking about adults, as one was seen back in Norway (JP558, pictured below) when aged as a third summer during 2015. It having wintered here at Dawlish Warren every year since 2013.

Great Black-backed Gull- JP558 , Dawlish Warren, 24th September 2016, Lee Collins

Localised movement

Ian Mclean is equally fascinated in looking for and recording ringed gulls. He's based on the nearby Axe Estuary, some 28kms away to our east. Drawn by his involvement and out of sheer curiousity I made contact with him and he was more than happy to supply me with a detailed breakdown of the 89 different ringed individuals he'd recorded during 2016.

It was a useful undertaking and something I'd surprisingly never addressed before. Of the 89 he'd found 37 had been recorded here at Dawlish Warren, although only 23 during the calendar year. Percentage-wise it would show that 42.6% of all the birds recorded here at Dawlish Warren during 2016 had also been seen on the Axe Estuary.

With such a high account of multiple observations from both the Axe and Exe estuaries it genuinely surprised me. Over the last few years I'd stubbornly believed it to be somewhat nomadic outside of the breeding season yet this data had me re-evaluating everything I'd previously drawn upon. Facts don't lie, it still holds true that a large majority of the birds found here at Dawlish Warren don't linger but with so many also recorded on the Axe does indicate some degree of localised movement.

Lesser Black-backed Gull

We record far smaller numbers onsite compared to that of Great Black-backed Gull, this compounded by the fact few choose to roost over any given high tide. Over 2015 not a single ringed bird was recorded and prior to this I'd only eleven individuals, a vast imbalance when compared to it's larger congeners of over 18 to 1.

2016 would be an excellent year, finding and positively identifying four individuals, all being recorded over a twenty day period in late August/ mid September. All were adults and each seen just a single day, this along with the dates clearly implying passing migrants.

Lesser Black-backed Gull, Dawlish Warren, 28th August 2016, Lee Collins

This species is far more migratory than Great Black-backed Gulls and I was delighted to discover each bird, all ringed as adults in the Channel Islands between 2010-13 had multi-observations showing a rich collection of observations from many countries.

One individual was recorded in both Spain and Portugal, another also noted in Portugal, whilst a third and perhaps the most interesting highlighted a behavioural trait that shows both summer and winter site fidelity.

The bird in question, seen by myself on the 12th September was recorded just a week prior on the 5th in Alderney, Channel Islands. A few weeks after my sighting it was discovered in the very heartland of mainland Spain at Colmenar Viejo landfill in Madrid.

Inland accounts of Lesser's are not uncommon, they're a species well adapted to urban life, with large numbers recorded in the very heart of the UK. The BTO's species account suggests a similar representation when assessing inland recoveries in Spain. This particular bird has been recorded wintering annually at Colmenar Viejo landfill since November 2013, whilst also annually recorded in the Channel Islands during the summer months.

This was an interesting insight for me in learning of the species strategic behavioural trait, including wintering site fidelity, especially so far inland. Gulls as a rule are known to show such site loyalty, our returning wintering Bonaparte's Gull a prime example of this.

Common Gull

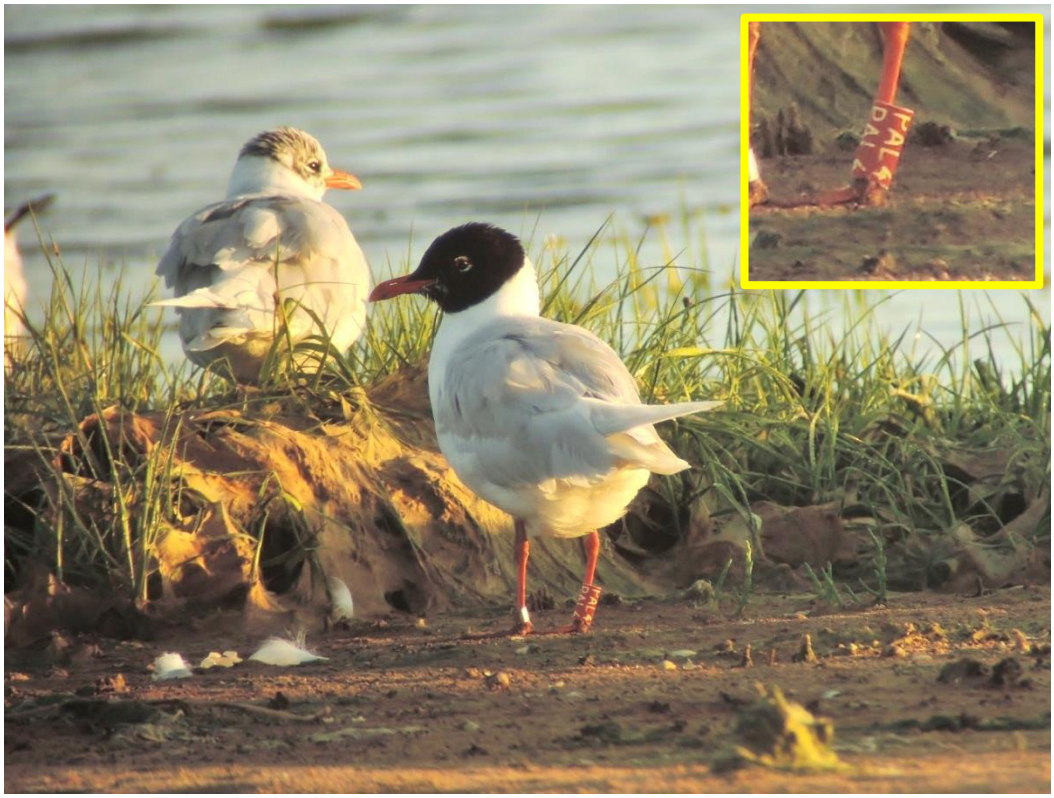
With just two ringed individuals recorded prior to 2016, this species although not uncommon does present a major challenge. The main reason being that the majority we note onsite are often seen at great distance, roosting in the saltmarsh or loafing around the sandbars either offshore or on Bull Hill in the estuary mouth.

One ringed bird was successfully read (another was seen but unsuccessfully read on the same day), found on the 10th January on an offshore sandbar. It was a first winter, bearing a green darvic ring and was ringed at Gismerøya, Vest-Agder, Norway on the 9th July 2015. The sighting I was informed the first report of it since the ring administered.

Mediterranean Gull

A somewhat disappointing year in regards finds for me, noting four (seven reads), all observed as usual during July and August. Three birds were new and much like a large proportion of historic recoveries all were noted on just a single date, alluding to passage drop-ins. The forthcoming news on each representative and in keeping on historically based known geographical results.

The first, an adult (red PAL4) was from Poland, this ringed in 2007. It was interesting to note that although a new bird for site it displayed a pattern of occurrence that was noteworthy. Accounts of its presence have been observed almost annually since 2007 each autumn either in Devon (Axe 2011 and Braunton 2012) or Cornwall (2007, 08, 11, 12 & 15).



Mediterranean Gull (PAL4), Dawlish Warren, 18th July 2016, Lee Collins

A second summer (green REP8), was French-ringed. It had six subsequent observations all in France. The third was a first summer (white 3NPH), this was ringed in Holland and again had several observations, seven in total and once again all in France.

Mediterranean Gull, Dawlish Warren, 28th August 2016, Lee Collins

My fourth bird, depicted below was white 32P1. This is an annual autumn regular, a bird that was ringed initially in Poland in May 2007 as red PAR7, although the darvic ring changed in June 2010 in France to 32P1. First recorded onsite in 2009 we've now has a solid set of records over seven different autumns onsite and in total have 22 accounts from here, on which four were noted in 2016.

Mediterranean Gull, Dawlish Warren, 22nd July 2016, Lee Collins

A fifth bird (adult) was found, although unsuccessfully read in February, this an unseasonal account in the context of my recoveries. It frequented Bull Hill sandbar and the sheer distance made gaining a good read impossible, although assumed to be Polish ringed. It's always frustrating when I fail to secure a read, more so when I'd such a paucity of Med Gull recoveries outside the autumn period.

During the last four years I've made 34 reads, the majority focused around the months of July and August. Only four accounts have been outside these months, two in late June, one in mid-September, while my only late first winter period read was in late March (2013).

Black-headed Gull

Much like Mediterranean Gulls , my Black-headed Gull recovery work is only observed during post breeding dispersal, in the main centred around the months of July and August, a time when we observe our biggest numbers onsite.

Despite the species abundance and gregarious nature, combined with it's urban affiliations I am stuck by the fact that a high percentage of my recoveries do bear witness to a complete lack of previous sightings. Something that underlines a general unwillingness by birders to either seriously look at such a common species or actively engage in recovery work.

My involvement and success with this species, much like my results with Oystercatchers epitomise my attitude and mindset towards birding as a whole. During late summer visits birds can congregate in

large numbers, during particularly productive visits several hundreds are recorded voraciously feeding along the shoreline. Such large gatherings will find most birders motivated on finding a Mediterranean Gull or two and in doing so pay little attention to this species. I on the other hand try to look at every bird (it can be frustratingly difficult when they're constantly flushed by people walking the beach) and I find such situations have huge appeal and I become ensconced in seeking out ringed individuals.

Over 2016 I'd find and read rings on seven different individuals making 12 reads, the outcome proportionally representative with the last two years.

Three of these would constitute new recoveries. Two (adults) administered with white darvic rings were from a scheme familar to us and in terms of recovery work relatively localised, ringed as pulli at Hosehill Lake in Berkshire. The third bird, remains a bit of a mystery, it to had a white darvic ring and successfully read. I'm yet to receive news on the birds life history, yet know it to be Danish ringed, my first ever darvic ringed bird from this country.

The four remaining individuals, all having been recorded prior to 2016 are by this very nature a more interesting proposition. They'd involve birds ringed in Surrey (white darvic, 26L1), ringed as a pullus in 2013 and seen onsite in 2013 and 2015; a German bird (black darvic, X1E9), ringed in as an adult 2015 and also recorded in 2015, this bird frequently observed during 2016 between 22nd July and 15th September, the long duration of stay (eight weeks) an indicator that some stay localised for a considerable period of time; a Polish-ringed (white darvic, T7VE) individual, this being ringed as a pullus in 2012 and recorded onsite on 2014 and a metal-ringed Danish bird, ringed 2013 and present onsite in 2015.

Black-headed Gull (T7VE, Polish ringed), Dawlish Warren, 28th August 2016, Lee Collins

These findings all reaffirm some inclination towards a post breeding migratory pattern that clearly points towards some degree of structured routine. With over a 50% recovery rate during 2016 of birds previous recorded onsite it clearly demonstrates some affiliation, albeit of birds enroute to wintering

grounds. Whats equally fascinating is the localised behaviour they exhibit, remaining loyal to the lower Exe. At Bowling Green Marsh, just a few kilometres upriver birders also observe large tidal gatherings, in fact in far greater numbers. Over the last few years Keith Birchall has also paid particular interest in seeking out ringed birds and it's of great interest that comparisons indicate a large percentage of the birds we record onsite aren't seen at Bowling Green Marsh or vice versa. It's in acquiring this kind of information that underpins my involvement and motivates me, wishing to better understand more about individual species behaviourism.

Sandwich Tern

Although the species doesn't breed onsite or indeed anywhere within the county, Dawlish Warren is the best place to observe this species and in good numbers. The months of July and August annually record counts of about 200 individuals and can allow unparalleled views from the hide during this period.

In much the same context as our Oystercatchers, it's a species that due to its abundance see's many birders present scan through the gatherings in the hope of seeing smaller Terns, paying scant attention to this wonderful species. Pre-2012 I was very much of the same mentality.

Since 2012 I've actively engaged in seeking out and reading ringed birds, achieving a great deal of success. Pre-2016 I'd recorded reads on 56 different individuals onsite and it's through these I've gained a much better understanding and appreciation for them.

2015 was a particularly productive time, as over a seven week period during July and August I'd amass a total of 61 successful reads of some 35 individuals, which I talked about in great length in my 2015 report. I was somewhat disappointed that in the 2015 annual Devon Bird report no reference was given towards my recovery work for this species.

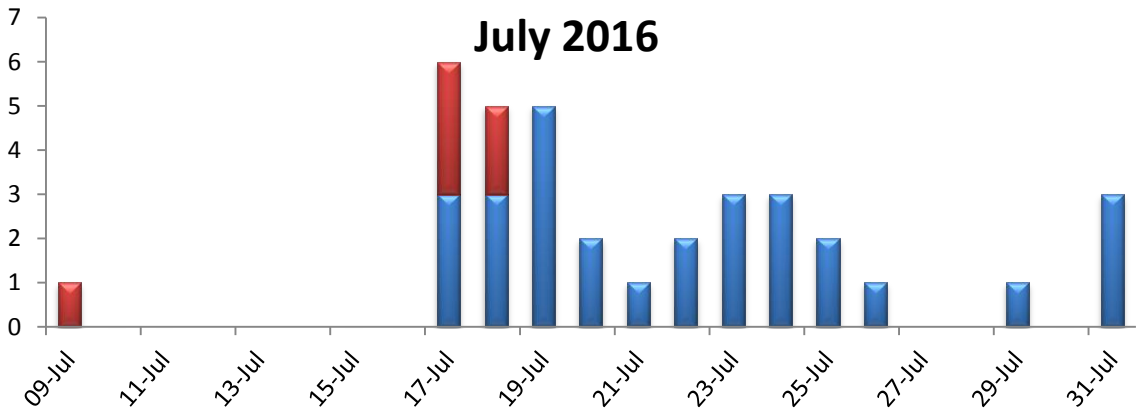
Sandwich Tern (and Little Gull), Dawlish Warren, 19th July 2016, Lee Collins

During 2016 I had to work a lot harder compared to previous years in acquiring many of my reads. The changing high-tide roosting behaviour once commonplace in front the hide now seems to concentrate predominantly on Finger Point, although not always. These unforeseen changes have hindered me greatly, metal ring reads are impossible to acquire during such times and reading of the darvic rings more challenging due to the distance involved and on particularly hot days hampered by heat haze.

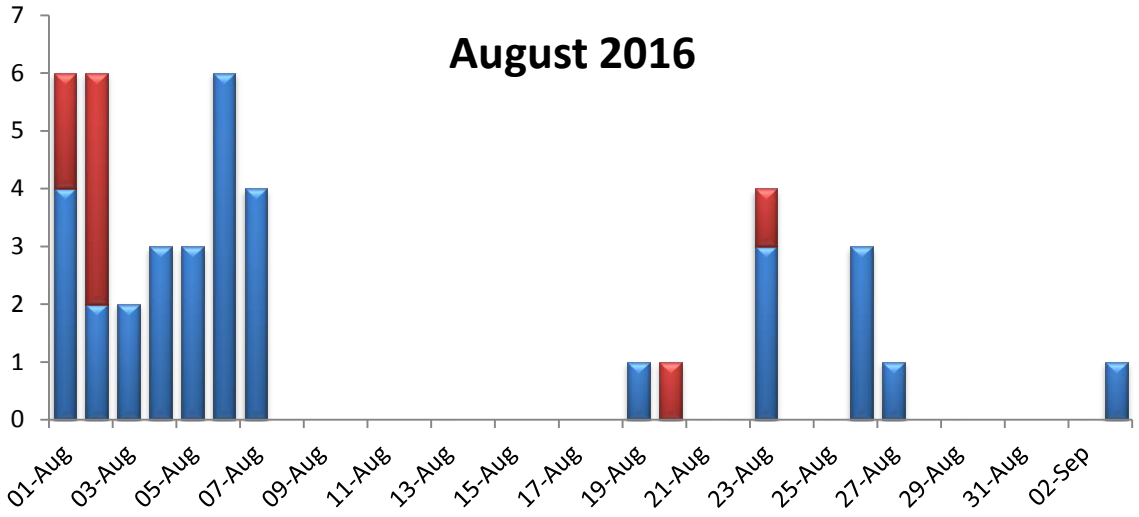
Geological changes onsite are of course an ongoing and continual process. Finger Point, a sandspit which lies on the northern end of the Bight continues to build and in the last few years has now become the key area in which Oystercatchers willingly choose to roost over the high-tides. Last year, Sandwich Terns began to follow suit to a degree, although over 2016 it was noticeable that a change in their roosting habits is starting to develop, as on very few occasions birds would roost in front the hide in any great numbers. Their reasons for doing so maybe a protection policy of safety in numbers, choosing to accompany the gathering Oystercatchers. Another contributing factor could be the avoidance of Carrion Crow predation, something witnessed for at least seven years onsite. In previous years at least one juvenile a day was generally noted to have been predated from the roost in front of the hide. Crow numbers around the hide generally number a dozen or so birds, and although it's a fact of life, watching a group of crows peck a juvenile Sandwich Tern to death is not something I enjoy watching, and did witness once again this year, early in the season. The very same crows seem unwilling to fly the few hundred yards to Finger Point, and thus no further predation witnessed.

During July and August of 2016 I'd once again pay a great deal of time in working as many high-tides as possible, present over 55 in total. Overall I made **78** reads, a substantial increase on the 61 noted during 2015. This would involve **32** different individuals, a small reduction on the previous year but nevertheless a good haul. These would include 19 individuals bearing darvic rings with the remaining 13 accountable with the more strenuous task of acquiring reads of the metal rings. This is a far more difficult proposition but not impossible. On the few occasions birds did roost in front of the hide it would demonstrate the value of the hides placement in gaining excellent close quarter views.

- A breakdown of visits and reads recorded over July and August 2016

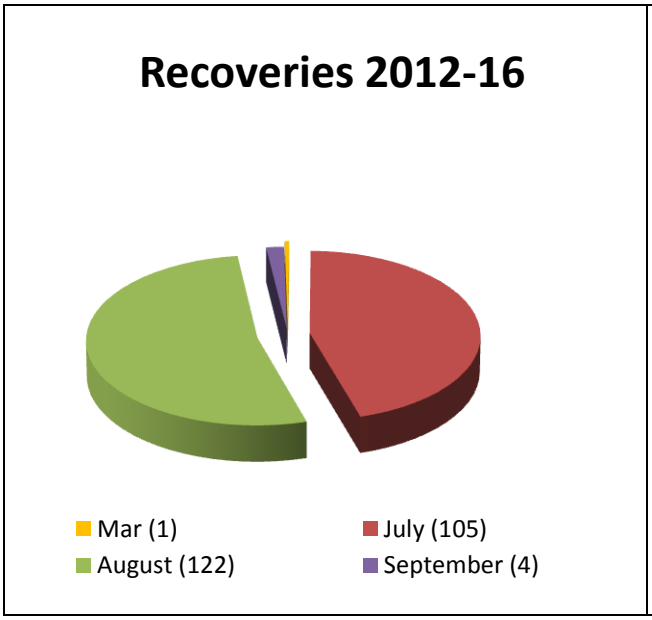


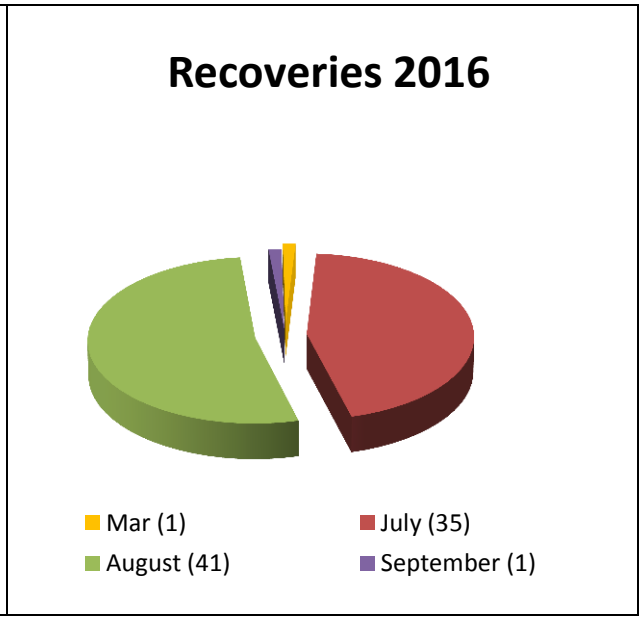
	09-Jul	10-Jul	11-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	29-Jul	30-Jul	31-Jul
metal	1	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0
Darvic	0	0	0	0	0	3	3	5	2	1	2	3	3	2	1	1	0	3



	01-Aug	02-Aug	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug	13-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	02-Sep	03-Sep
metal	2	4	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
Darvic	4	2	2	3	3	6	4	0	0	0	1	0	0	0	3	0	3	1	0	0	0	1

- My monthly breakdown of reads made over 2016 (x78) exhibit an almost identical pattern of return to a combined set of readings I've acquired over the last four years, which now stands at **232** reads. My window of opportunity to a greater extent based over a six/ seven week period from the second/ third week of July through to the end of August.





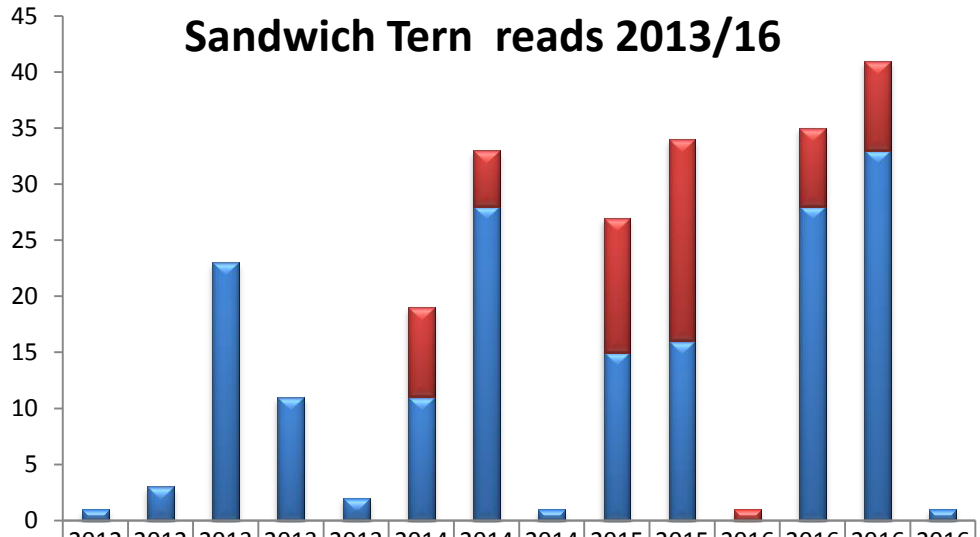
- Twenty seven of the ringed birds noted were adults, the remaining five being juveniles, this a similar adult/ juvenile recovery ratio to last year.
- Juveniles are a fascinating case study in their own right, having only been ringed a matter of a month or two prior. Many if not all post-fledging juveniles depart their natal colonies accompanying their parents, learning and honing the rudementary lifeskills necessary to survive.

Based on the healthy numbers of juveniles seen during 2016 onsite it would suggest a successful breeding season. During mid-late July 2016 I'd record four counts of juveniles in excess of 50+, peaking with 70+ on the 25th.

The vast majority were unringed as expected, very few breeding colonies have an active ringing programme and this therefore this gives us an incomplete account of where our birds arrive from. But by finding marked individual(s) this does give us some degree of incite into post fledging dispersal. Results to date clearly inform us some of the birds we're seeing onsite do arrived from Holland. I'd have liked to have found more ringed juvenile birds, although every ringed bird I found was successfully read.

This year all of the five juveniles recorded were from Holland and this reaffirms pre-existing data over the last few years. During 2012-15 I'd recorded 16 ringed juveniles onsite. This now shows we've recorded 21 individuals over the last five years, 18 (=85.7%) of which having been ringed in Holland, the remaining three from England, Wales and Germany. Two such individuals over 2016 were to linger, noted over a five-week period. This interesting data reaffirming pre-2016 observations of other juveniles and helps prove Dawlish Warren's importance as a key area in post breeding dispersal.

- Of the 27 adults there is a broader, less bias nature to proceedings. Dutch-ringed birds still accounted for a sizeable percentage, with six (22.2%). The remainder from: England= six (*five*); Scotland= three (*nine*); Wales= four (*three*); Republic of Ireland= four (*two*); Northern Ireland= one (*one*); Belgium= two (*three*) and Poland= one (*one*). **The bracket figure from 2015, for comparison.*



	2012 July	2012 Aug	2013 July	2013 Aug	2013 Sep	2014 July	2014 Aug	2014 Sep	2015 July	2015 Aug	2016 Mar	2016 July	2016 Aug	2016 Sep
metal reads						8	5		12	18	1	7	8	
darvic reads	1	3	23	11	2	11	28	1	15	16		28	33	1

- The table above shows a breakdown of my Sandwich Tern recovery work over the last four years and does show a continued year-on-year increase in reads.
- This does include duplicate reads i.e. reads made of the same individual on different days. Such findings have helped build a clearer picture on how long individuals remain in situ, thus offering

crucially significant information on the importance Dawlish Warren plays during post-breeding dispersal.

- It's also important to state that not every individual bird noted onsite will drop conveniently in front the hide on any given visit and as such, if a long-staying individual is not seen on a specific visit this doesn't indicate the bird has now moved through, just not seen on that given tide and may well be recorded on subsequent visits.
- Metal ring reads were down on 2015, this not through lack of effort but accountable by the fact the roosting assemblage would generally favour roosting on finger point. During such times metal reads are impossible to acquire.
- Five of the 32 recorded individuals (or 15%) had also been recorded onsite prior to 2016. Three of them I'd recorded over three different years. This does clearly point towards some degree of post breeding site fidelity. Such discoveries are welcomed and fascinating but further heightened when pointing out that two of these birds were identified based on metal reads! These individuals being older, pre-darvic and ringed in Hants in 2005 and Holland in 2009.
- In March I'd acquire my first ever positive spring read. It was metal ringed and would also constitute my oldest Sandwich Tern recovery, being ringed as a nestling at Lady's Island, Wexford, Ireland in 1993.

Sandwich Tern (metal ringed), Dawlish Warren, 26th March 2016, Lee Collins.

- Another equally interesting account was of two individuals, red KAH and KAL. Both were ringed as an adult and assumedly it's juvenile offspring on the same date as passage migrants at the Dyfi Estuary, Wales in 2013. Both were recorded at Dawlish Warren just 21 days after being captured. I was astonished to discover both alive and well and present at Dawlish Warren over a two-week period, often in close proximately to one another during late July/ early August 2016.

Sandwich Tern (red KAL), Dawlish Warren, 2nd August 2016, Lee Collins

Sandwich Tern (red KAH), Dawlish Warren, 2nd August 2016, Lee Collins

What were the chances after three years of witnessing both onsite together? What could be gleaned by such findings? It clearly pointed towards some degree of site fidelity, albeit as a migratory stopover site. But had they bred at the same breeding grounds? Probably. If so where? Having been ringed in west Wales I'm assuming somewhere in Ireland or north Wales? Had they dispersed from breeding grounds together? Probably not, although the duration of their stay, combined with similar arrival and departure dates does seem more than a

coincidence? Sadly with no other recovery account of them anywhere we've currently no answers to this intriging set of recovery results.

- A high percentage of the birds I've recorded onsite have no recovery history at all, suggesting recovery rates even on coloured darvic-ringed birds are very low indeed.
- Three of the darvic ringed birds found over 2016 had a recovery history that included previous winter sightings from Walvis Bay, Namibia. Mark Boorman is a name frequently associated with most of these sightings and although it's a known fact they winter this far south his recovery work gives some invaluable insight that the birds we see onsite are travelling over 8,300km to wintering quarters.
- Of the 14 adult darvic ringed birds I recorded only one had an additional summer sighting during 2016. Blue ECH, which was ringed on the Ythan Estuary in 2008, recaptured at the same site in 2013 when the darvic ring applied and also noted at the same site over June/ July 2016.
- Autumn movements continue to intrigue me. One bird, juvenile Yellow N6L, pictured below was noted over a five-week period between 23rd July and 23rd August yet on the 2nd September was recorded several hundred miles north in Merseyside! This account of northerly movement over the autumn period although fascinating isn't new as we've had earlier accounts of others doing much the same thing. Previous such findings although have seen birds refound around the North Sea as far north as the Farne Islands.

Sandwich Tern (yellow N6L), Dawlish Warren, 25th July 2016, Lee Collins

- Several unsuccessful partial metal ring reads were also acquired, one in particular pointed towards it being ringed in South Africa.
- Below is a breakdown of where all my recoveries have been ringed

Sandwich Tern
2012- 16 recoveries

English 12

Scottish 16

Welsh 6

Irish 8

Dutch 31

German 1

Polish 2

Beligan 5

I would also like to give additional credit to many of the local patch birders. Over 2016 Dave, Ivan and especially Dean showed great willingness to engage in seeking out ringed individuals.

Roseate Tern

Here at Dawlish Warren we're extremely fortunate to encounter this species annually as it passes through site during each spring and autumn.

The best times in which to see this species are from mid-July through to mid-August. It's during this four-week period birds can occasionally be noted at close quarters within the Sandwich Tern flock from the hide. In 2016 despite the ongoing and incredible work being undertaken at breeding sites such as Rockabill (1556 pairs, up 150 on 2015) in Ireland and Coquet Island (100+) in Northumberland, where annually numbers continue to grow at these vital breeding colonies, this unfortunately didn't reflect a similar outcome onsite. During the month of July 2016 not a single bird was recorded, despite high birder coverage (I'd be present 15 days between 15- 31 July). This unwanted claim being the first July since 1973 in which we'd not record its presence onsite.

This was alarming, especially in light of the increasing numbers breeding in the UK and could it be a red flag indicator that all is not well onsite? Numbers of the commoner Sandwich Terns were similar to previous years, so what conclusion could be drawn from their lack of presence (*Common, Arctic and Little Terns were also much scarcer this autumn*)? Perhaps the fine weather mean't they'd used the conditions to push on south or could another explanation lie in the fact that the channel off the mouth of the Exe where they feed has now become too congested with human waterborne activities (kite-boarders, windsurfers, jetskiers)? If this is true a situation that worries me.

Roseate Tern, Dawlish Warren, 3rd August 2016, Lee Collins

Our first returning autumn bird and the only one I'd personally record over this period was found on the 3rd August. I initially picked it up offshore, later relocating it resting on Finger Point, when noting it was ringed. Things livened up further when I noticed it had moved once again, now perched on one of the many posts (woodhenge) on the island within the gathering of Sandwich Terns. Having birded here for over 30 years I'm accustomed to such views, but it's always a privilege to see this stunning species, especially at close quarters. Recoveries away from breeding colonies are scarce, I believe mine in 2015 was the only such one in the UK. Therefore I had only one goal in mind, that of acquiring a read superseded any thoughts of initially grabbing my camera.

This was not an easy proposition. I was confronted by a gap of approximately 35 yards and with the digits on the ring just a few millimetres in height it would prove a challenge. This is right on the very limit of my range to gain such a read but I managed it, noting with confidence the four digits on this specially designed (Rosy special) ring.

It was ringed at Rockabill, Ireland on the 3rd July 2014 as a nestling. I was also informed it wasn't recorded there over the summer of 2016, although could have been present yet went undetected.

Whimbrel

Since my heightened involvement in finding and reading rings here at Dawlish Warren one particular species I've been keen to find has always eluded me, that being Whimbrel. Over the last few springs I've kept a particularly keen eye out for them carefully scanning as many individuals as possible. It's a particularly abundant passage migrant during the latter period of each April.

The BTO have just one prior recovery for Devon, that back in 1987 also from Dawlish Warren, this individual seen four days later in Fetlar, Shetland. It's a species that does breed in small numbers in the UK, none south of the Grampians, most travelling further north to the boreal subarctic and low Arctic

zones of Europe, having undergone a long migratory journey seeing most winter in the southern hemisphere.

I like to think I've a pretty keen eye when it comes to finding ringed birds, although on the morning of the 18th April 2016 it was Dave Jewell who excitedly pointed out he'd a colour-ringed Whimbrel in the Bight. From our position at John's Watch the yellow ring really stood out, although frustratingly it remained too distant to get an accurate read and so we both hurried to the hide to gain a closer view. Once there it was quickly refound, feeding amongst a flock of 30 or so birds and with great relief and joy the code on the yellow ring (D63) was immediately acquired, as well as noting an additional uncoded green ring on its left tibia, something not initially apparent when seen at distance.

Acquiring just the second ever Whimbrel recovery in Devon would rank as one of my personal highlights over 2016 and I was indebted to Dave for finding it. The over-riding emotions experienced at the time are perhaps a hard one to contemplate by many birders when observing a common spring migrant. Yet to put this into some context, would rank more thrilling than finding a Wryneck onsite this year and on a par with also finding Kentish Plover and Caspian Gull!

The rings were administered to it on the 18th May 2015 at Llansantffraed, Llanon in west Wales. Inhand analysis when captured aged it as a second calendar year individual. Despite the presence of the brightly coloured yellow ring, this bird had gone unrecorded in the intervening period between being ringed and our observation. This something unfortunately mirrored by the majority of the birds ringed from this scheme, with only a handful of recoveries from the 300+ captured.

Whimbrel, Dawlish Warren, 23rd April 2016, Lee Collins

Another valid and equally important lesson was learn't in finding this bird. It was always my assumption on the numbers seen both coming in off the sea, or moving upriver, often in good numbers that the turnover was high. I'd assumed birds would stop only to briefly feed before moving onwards, maybe

staying just a few hours or a day or two at the most. So it was a real eye-opener that the bird, found on the 18th, would be noted on four other dates, last being noted on the 30th a stay of at least 13 days.

Curlew

It's a species that over the autumn and winter we record in good numbers, our largest count of the year made on the 6th August when 533 recorded. Such large numbers favour the railway saltmarsh during high tides and therefore are far too far away to undertake any attempt at acquiring ring reads.

I've had only minimal success in the past regards recovery work on this species, mostly for the above reasons. Just recently early morning high tides seem to unsettle them and large gatherings accrue on finger point. Whilst roosting here they remain highly skittish and easily flushed by anybody seeking an early morning stroll to Warren Point. Kayak disturbance in the saltmarsh is also another factor, this has been witnessed numerous times and as a direct result can lead to a large percentage taking brief refuge in front of the hide.

During 2016 I'd find two marked birds. The first, harbouring a combination of coded and uncoded rings was seen on the 4th June. It had been previously recorded onsite by Ivan Lakin in April and May and prior to that at Bowling Green Marsh. It had been ringed as a nestling a year to the day of my finding it on the 4th June 2015 at Glenbuchat in Aberdeenshire. It had obviously overwintered on the Exe, my June sighting may indicate it even over summered and was also recorded by myself during the second winter period on the 7th October.

My second bird, found on the 2nd September is a bird I'd recorded several times prior. It has a combination of uncoded colour rings placed on each tibia, one particular ring (blue) now so faded its appearance now seems somewhat grey. I've recorded this bird annually since 2013. I don't have a full account of the birds life history, although know it was ringed in Steinfurt, Germany on the 9 May 2009. As well as having a strong wintering affliation to the Exe it has also been recorded several times in Germany during the breeding season.

Brent Goose

Dark-bellied Brent

The act of ringing them and recording subsequent recoveries has long shown it's a species with a strong affiliation towards wintering site fidelity. This structured behavour is vital, as with many other long distant migrants. Such traits negate or certainly minimize the element of chance. Their migratory journey will see individuals travel as much as 5000 miles to wintering quarters and a clear knowledge of known, reliable rich feeding grounds see's birds return annually.

The Exe Estuary is a nationally important wintering area for Dark-bellied Brent's. During 2016 a January WeBs count recording 1767. Just a few marked individuals can be found on the Exe and conform to such behaviour.

Dark-bellied Brent, Dawlish Warren, 26th March 2016, Lee Collins

At Dawlish Warren we see good numbers, during 2016 peaking at 395 in mid-December. Opportunities to engage in recovery work during the first few months of their arrival are surprisingly difficult, for they are to be found feeding in the estuary, legs generally unexposed. They'll switch feeding habits into the new year, choosing to graze on grass pastures and although many may switch to other areas around the Exe, good numbers frequent the adjacent golf course, voraciously feeding on the fairways.

This switch greatly enhances my prospects, although finding any ringed bird remains a challenge. Two birds were ultimately recorded, the first a metal-ringed bird shown above was recorded over both winter periods, this the fourth consectutive winter I've recorded it. It was ringed back in 2008 on Middle Beacon Island in the Taymyr region of northern Russia and it's of particular interest to record its wintering presense as it is the farthest traveled bird I hold on record with a known history of site fidelity.

My second bird, a new individual for me was discovered on the 4th October. It had two coded rings, one on each leg and the scheme was one I'd some experience of, its origins lying just a few miles away, higher up the river at Powderham.

Brent Goose (O=RR), Dawlish Warren, 4th October 2016, Lee Collins

It was ringed on the 8th February 1996, therefore making it at least 20 years old. The ring on the right tarsus was heavily worn and gnarly. Red in colouration, the white 'R' was difficult to discern, whilst two decades of wear had also caused two large fissures on develop, on both the top and bottom of the ring. This is visible on the image above and with continued wear may ultimately see the ring dispensed. Parting with this adornment could render this individual unidentifiable. The other ring was orange in colour and had two black bands, one on the top the other in the middle. Its similarity mirroring the wasp rings used to help identify Oystercatchers from the same era, which I've touched on earlier in this report.

Based on the birds age and species habitual trait it was perhaps surprising I'd never seen this bird before, although records show it was recorded here in January 2002. It's a well observed and highly documented individual. The online website, www.geese.org informed me its been officially recorded on 61 occasions, the vast majority of these based around the Exe estuary. Although ringed 20 years ago it has only been recorded over 10 different winter periods from around the Exe, the last at Turf Lock in March 2014. It's my assumption that it over winters on the estuary every year and therefore indicates it either gets overlooked or if seen not officially recorded.

Additional sightings of it elsewhere although somewhat limited do suggest some degree of consistency, with several records during March and April in Holland and Germany. The only additional and equally important observation relates to a September 2016 account of it on the Thames Estuary at Leigh-on Sea, this just seven days prior to my observation. Although we've no documented accounts of it further north or east than Germany it implies that during migration it probably follows a flight path passing through Germany and Holland before crossing into the United Kingdom in the southeast and continuing west until reaching its wintering quarters here at the Exe.

A final thought, it would seem an appropriate time to mention that if anybody does record this individual (reference O=RR), or indeed any colour ringed Brent Goose on the Exe over the next few

years to make every effort to either submit such a sighting with the BTO or register and submit to **www.geese.org.**

Pale-bellied Brent

This Icelandic race (*Branta bernicula hrota*) is noted onsite, best observed in April when we can encounter some sizeable flocks dropping in as they migrate north to breed.

I've just two recoveries to date, my first way back in November 2008, being an Icelandic ringed individual and the second from May 2012, that was ringed in Northern Ireland.

Winter sightings are a much less frequent occurrence, in fact finding any within the hundreds of Dark-bellies during this period is relatively uncommon. So I was delighted on the 16th December to pick up a group of six, all adults and surely new arrivals. Initially found swimming I pointed them out to Dave and Alan who despite the rather poor light conditions were keen to acquire some pictures. I focused my attention elsewhere although soon after was drawn back to them. On the falling tide they were now standing and I was delighted to discover one was clearly ringed. After recording the ring combination I acquired the image below.

This bird had a well documented and interesting life history since the application of the rings at Álftanes, Iceland in May 2014. It has been recorded back in Iceland over the following two summers, around the Álftanes area. That in itself was fascinating although better still was that annual observations from several sites clearly implied it had a structured behavioural pattern. Each autumn it would appear at Strangford Lough, Northern Ireland, during 2014 and 2015 remaining for at least five weeks and perhaps it did the same during 2016 although only recorded there once. Wintering observations imply it winters in Dorset, accounts from the Fleet are infrequent but likewise annual, suggesting it does remain localised during the onset of winter.

Pale-bellied Brent, Dawlish Warren, 16th December 2016, Lee Collins

One of the most fascinating aspects and something I'd never realised or even contemplated until this discovery was in questioning why the six birds had dropped in onsite? The unseasonally mild winter ruled out cold weather movement and the answer to this lay in previous observations which shows it returns in a northerly migratory pattern as early as December. This is documented by the fact its been noted around Angle Bay, Milford Haven in Wales in January 2015 and December 2015.

Although this was the first time it had been recorded here at Dawlish Warren it is arguably the most interesting account of a structured migratory pattern of any bird I've recorded onsite and this further enhanced in discovering this bird had in fact been resighted the following day in Pembrokeshire!

Just one question remains unanswered? where does it go between January in Wales and arrival back in Iceland in late April/early May? Ireland would perhaps seem the logical answer, or at least stopping off enroute as per its autumn movements. An e-mail early January 2017 informed me it was refound on the 29th December at Dundalk Bay, County Lough, this sighting adding more insight on this birds fascinating migratory behaviour.

Cormorant

This is a species that although recorded in comparatively good numbers has a relatively poor history in the context of recovery work. Just three prior to 2016, myself just one in 2014. Consequently it's a species I have practically no experience in regards recovery knowledge.

Therefore I was delighted when Dean Hall discovered a juvenile with a green darvic-ringed on the 3rd September. The bird was found amongst the roosting assemblage on Finger Point, an area commonly frequented by this species over the high tides. From our location in the hide the ring was clearly readable and likewise gratefully welcomed. It's duration of stay would mirror that of the juvenile seen in 2014, staying a few weeks before disappearing and last seen on the 9th October.

Cormorant (ZDE), Dawlish Warren, 10th September 2016, Lee Collins

I was curious as to where this juvenile had been ringed and shortly thereafter informed from Puffin Island, Anglesey on the 25th June, our resighting the first since being ringed.

Although I still feel ill-equiped in general terms on this species movement it's interesting to note that this is the second ringed from Wales, the remaining two from Cornwall and Essex.

Shelduck

During the winter period we record good numbers onsite and during 2016 they peaked at 122 on the 2nd January.

December historically has been my most productive month in regards my recovery work but this year perhaps due to the mild conditions proved a somewhat lean period.

During the calendar year four ringed birds were recorded, making eight reads (*cf 18 in 2015*). Each individual displayed some degree of wintering fidelity as all had multi-year accounts ranging from three to five years observational sightings onsite. Three birds harbouring yellow coded darvic rings were recorded in January, November and December, these ringed at Seaton Marsh during 2012-14.

My fourth bird was ringed at Steart, Somerset in September 2005. This individual having just a metal ring has been recorded by myself annually since 2013. It would be noted several times during January through to March yet unfortunately not over the second winter period.

It's worth mentioning that I didn't see every recorded ringed bird during 2016. I missed six, these found by other members of the Dawlish Warren recording group, the best being a Spoonbill in November.

To all those that have take the time to read this report, thank you. I hope it's been an enjoyable read.

From personal experience very few birders willingly engage in submitting recoveries, indeed most have probably never done so. Marked birds are not that uncommon yet obviously go overlooked or ignored. This reports dual aim is to promote, educate and encourage others to become more aware of an aspect of birding that is arguably and sadly neglected by many.

I'm a birder no different to any other, what I have achieved required no formal training, just a keen eye, although I'm extremely fortunate to have such an amazing site in which I call my local patch.

Marked birds are marked for a reason, they can turn up anytime or anywhere. The BTO and of course the ringers who administer the rings are extremely grateful for any observations. So if you do come across a marked bird please don't ignore it. Aren't you not intrigued to know more about it? Record the read accurately, maybe even photograph it, but make sure you then go home and go online and submit your finding. For anybody unsure how to do this I am contactable through the Dawlish Warren website or on twitter at @WarrenBirding.

An obvious example of the benefits of doing so can be highlighted by one species. I'm sure many are aware of the rapidly dwindling numbers of Curlew in the UK. Great effort has gone into marking many in

the hope this will help with any conservation issues that can help protect it. This is a prime example of where you can by finding a marked individual make a small but telling contribution.

And finally to finish the report I'd like to give credit to several people for their input. To Kevin Rylands, for his valuable contribution, as editor and promotor. His Dawlish Warren website is followed by many and from personal experience many birders are fascinated by the recoveries that are posted on it. To all the various ringers, not just from the UK but further afield that have assisted me this year. Also to the BTO, especially Lee Barber who has been very supportive towards me. To Ian Mclean, for allowing me access to his gull records on the Axe Estuary. And finally to Gavin Baptie. He lives in Scotland, but a chance encounter at Dawlish Warren has grown into a genuine friendship. He's likeminded too myself, a birder at heart though an equally keen advocate in seeking out ringed birds. He kindly went to great lengths to proof read my report and make the necessary edits. Thank you all.