Contents

Portrane Little Tern project 2025

Thomas Kavanagh

Figure 1: Portrane

Sternula albifrons albifrons

A continuation of the attempt to save their last nesting site in county Dublin.

The Little Tern Conservation Project in Portrane, Co. Dublin is managed by Bird Watch Ireland, Fingal Branch. In 2025 this project received support from The Department of Housing, Local Government and Heritage through the National Parks and Wildlife Service's National Biodiversity Action Plan Fund, and by Fingal County Council. Our ringing project for both the Little Tern and Ringed Plover was supported by Birdwatch Ireland.

Acknowledgements

I would like to thank the Department of Housing, Local Government and Heritage who provided support

through the National Parks and Wildlife Service's National Biodiversity Action Plan Fund. We would also like to thank Fingal County Council for their ongoing support. In particular, we would like to thank Hans Visser and Lorraine Bull, from Fingal County Council for securing the funding for the materials for this project. Our thanks also to Dublin National Parks and Wildlife Service ranger Robert Mulraney for his co-operation and support in securing our electric and other security materials. We are very grateful to the dedicated team of volunteers who contributed time and assistance to the project: Aggie Gilligan, Barney Johnson, Brendan Black, Brian Caruthers, Cormac Crowley, Cristia, Daniele Gioppo, Derek O'Brien, Emily Francis, Gary White, J Cullen and his son Michael, Jan Rod, Jim (Chick) McNally, Céline Reilly, Jim Dixon, John Lovatt, Linda Mellon, Michael Ryan, Mick, Mark Keane, Pat McBride, Paul Lynch, Paul Hanna, Paul Houraghan, Pauline F, Peter Donnelly, Ronan Toomey, Sandra White, Stephan McDermot, Suzanne, Tom n Maureen Carroll, Ulla O'Riordan, Vicky, Sarah, and, Vincent Toal, and my humblest apologies if I've left you out. I would like to thank the regular local visitors to the colony and the members of the public who not only adhered to the restrictions in place but gave us the encouragement to keep going.

Figure 2: Nest L0125 A single egg puzzle, A8T ♀ and IZ7 ♂.

Abstract

Portrane 25 became our official title on April 26th. The coastal erosion at Portrane has continued. The

nesting area at the northern end of Portrane beach has once again changed. Regular beach inspections at Portrane were carried out by team members between December 2024 and April 2025 to evaluate the nesting site. Through our observations we were able to calculate that there was sufficient shingle for a 2025 breeding season at Portrane. The northern area of the site which would later be divided and referred to as Area A and Area B seemed to be the safest area for nesting. The area was high enough to be safe from any encroaching tide. The western side of Area A and Area B was sand and in April was devoid of vegetation. Later in May this was transformed by thick vegetation and it provided cover for chicks to hide. The south eastern side of this area comprised of small to medium sized stone and seemed less favourable for nesting. The remaining mid-section and eastern side comprised of shingle and we predicted that this area would provide the most suitable space for nesting. There was a shingle area about one hundred metres to the south that offered a safe nesting area. We would later label this site as Area D. The site immediately to the south of Area B was initially thought to be too low for the spring tides although the shingle content was perfect for nesting. Shortly before the erection of the fencing we decided to encompass this area within our site and thus Area C was established. It was thought that having two separate areas with public access between the two would be too difficult to manage. It was considered that the potential for disturbance to the colony would be too great.

Members of the team met with Lorraine Bull from F.C.C. at the site on February 28th. Discussions about various aspects of the project took place and it was agreed by all that the project should go ahead as planned.

Prior to the erection of the fencing we examined an area of the beach that looked the most suitable breeding area for little tern and ringed plover. On April 26th 2025 with the aid of the contractor James Flood (funded by F.C.C) we erected as series of posts for both the inner and outer fences. We then attached the black netting to the inner series of poles. Strands of rope were then attached to the outward series of poles. We divided the area into three sections. The North end included much of 2024's North end and was the highest part of the nesting area. The mid-section had been re-created by the winter storms and comprised of shingle. This area was approximately 60cm lower than the North area. It was noted that this area would be under threat from very high tides. The area to the South was slightly higher than the mid-section. This area had contained marram grass in 2024 but most of the grass had been washed away during the winter. As a result of the loss neither meadow pipit (Anthus pratensis), nor skylark (Alauda arvensis) bred within our boundaries. However both species bred within meters from the western edge of the site. They visited the small area of marram grass east of the tent and the lagoon to feed. Ringed plover (Charadrius hiaticula) did nest both inside and outside of the site. It was noted that at least three ringed plover nests were complete prior to the construction of the site.

The wardening of the little tern (Sternula albifrons) colony at Portrane was initiated on May 18th 2025. It was noted that the 1st Ringed plover egg was found mid-April. On May 17th two little tern nests were discovered and were deemed to be under construction in Area C. On the 19th we discovered a 3 egg completed nest in the North end of the colony. Based upon our experiences of egg laying we estimated that the 1st little tern egg was laid on or before May 16th.

A number of issues had been raised prior to this year's project. Among them was the lack of nearby toilet facilities and no proper shelter such as a caravan. We had also asked for paid staff to assist in the wardening. All of the above failed to materialise. The lack of these necessities unfortunately, would greatly contribute to our losses during the 2025 project. The lack of toilet facilities greatly reduced the amount of hours volunteers contributed. Our 1st tent had to be replaced as it was destroyed by high winds. On the 4th of July our 2nd tent was also destroyed by high winds. Due to resource issues we were again unable to operate a night wardening roster. The lack of provision for a night warden meant that night predation and tidal conditions could only be reacted to after the night's events.

Figure 3: Nest L0924 B0X ♀ and IN1 ♂ re-nested as L1925 again 3 eggs.

Project aims

Portrane little tern project strives:

"To provide a safe and secure environment in which Little Tern and Ringed Plover can reproduce and fledge their young and so contribute to the fulfilment of Ireland's legal obligation under the EU Bird's directive".

In order to achieve this, BWI Fingal through its wardening sets out:

To promote awareness within the local community and the visiting public that it is only through their co-operation that success will be achieved.
To erect a physical barrier to discourage ground predation of the nesting site.
To maintain surveillance during daylight hours to deter avian and other predators from taking eggs, chicks or adult birds.
To monitor, record, analyse and tabulate adult behaviour, food consumption, scrape location, egg yields, egg types, hatching efficiency, fledging proficiency, the returning Portrane birds.
To expand our knowledge of Little Tern conservationism.
To liaise with other projects in order to gather external experiences to enhance our project.
To record and monitor the ecosystem that is Portrane Beach.

“little” Terns

There are five species of tern breeding in Ireland, Artic tern *Sterna paradisaea*, Common tern *Sterna hirundo hirundo*, Little tern *Sternula albifrons albifrons*, Roseate tern *Sterna dougallii dougallii* and Sandwich tern *Thalasseus sandvicensis*. The knowledge that the reclassification of species is an organic process, ongoing and forever. It is my understanding that science will prove that these seemingly similar species are on different branches of the phylogenetic ‘tree’ with common ancestry. According to eBird/Clements Checklist v2021 there are seven species within the Genus Sternula with a further twelve subspecies. Similar species, the Least tern *Sternula antillarum antillarum* breeds in North America and winters to northern Brazil. Saunders tern *Sternula saundersi* nests from the Red Sea to India and Sri Lanka and winters to the Malay Peninsula. Little tern *Sternula albifrons albifrons* nests across the western Palearctic and winters on both sides of the African continent. The wintering location of Irish Sea Little Tern is as yet unknown. The relatively recent reclassification of “little” terns has led to the creation of a variety of subspecies. Future research on the migration patterns, food consumption, and the further divergence/isolation of these subspecies it is easy to conclude that the evolutionary process is occurring before our eyes on Portrane beach.

The Bird and its history in Ireland

The Little Tern (Sternula albifrons) is the smallest and scarcest of Ireland’s five breeding tern species. They are long distance migrants, wintering in West Africa and returning to Irish coasts to breed in late April and early May and departing again from late July to mid-September. The majority of Little Tern in Ireland nest on beaches that have a mixture of sand and shingle. Nests are composed of a shallow dip scraped in the beach substrate generally above the high tide line. The eggs and chicks are well camouflaged in the sand and shingle. Due to their nesting habitat, Little Tern are very vulnerable to recreational human disturbance, sea level rise and predation. Little Tern are classed as an Annex 1 species under the EU birds Directive (79/409/EEC), requiring member states to take special conservation measures to ensure their survival and breeding success. In Ireland and the United Kingdom, the species is amber listed by BirdWatch Ireland and the RSPB (Royal Society for the Protection of Birds), indicating that this species is of medium conservation concern. The little tern is fully protected under the Wildlife Act (1976, Amended 2000).
Little tern adults, average 21-25 cm in length and have a 41-47 cm wingspan. They have 1 brood with 2-3 eggs of an average size 32×24 mm and weighing = 9.6 g (of which 6% is shell). Their typical lifespan has been 12 years with breeding typically at year 3 (BTO data records). The oldest recorded bird in Ireland is 19 years and 25 in the UK. Sternula *Albifrons Albifrons* has been recorded in Ireland by Usher and Warren before the early part of the 20th Century. They noted that the largest colony in Ireland had over 50 pairs “known to nest”. Later Kennedy, Ruttledge and Scroope noted that little tern colonies were small and were up to 25 “little terns breeding” and that perhaps the species was in decline. However they did record a colony of 40

to 50 pairs in County Wexford. Today little tern are probably the scarcest breeding tern in Ireland. Post the 2019 project I visited Tory island in Donegal and during a discussion with local birder Anton Meenan discovered that a pair of Little Tern had attempted to nest near the lighthouse at the western end of the island. In 2025 2 pairs had attempted to nest on Tory island. During the 2021 project, a team member had a 2 adults flying near an island near Belmullet. In 2004 Pickerell cited in Cabot and Nisbet (p136, 2013) estimated that there were 206 breeding pairs in Ireland. We examined the nesting data of all the monitored little tern breeding sites on the east coast of Ireland in 2024. The total breeding pairs that year on the east coast was in excess of 440 pairs.

The 2025 report from Eccles Beach Norfolk little tern states that little tern "In the past, they have bred on the beaches of North Denes, Winterton and Kessingland in Suffolk, but this year all the birds returned to Eccles". In 2025 it would appear that the colony at Kilcoole split into 3 smaller colonies. The Kilcoole colony had approximately halved in size. Over 75 pairs attempted to nest at the north end of the beach east of Buckroney marsh. Another group of approximately 40 pairs attempted to nest north of Kilcoole railway station. This might suggest that when colonies reach a certain size and the conditions a right the colony will split. It also suggests that the splits if left unprotected will collapse. Both of the Kilcoole colony splits went unprotected and later collapsed.

The reproductive strategy of little terns places them in perilous situations ranging from inundation by the sea, loss of habitat, human and canine disturbance, natural predation and parental skills. There is no contingency plan by either BWI or the NPWS to protect little tern colonies in the event of colony splits. The lack of an overall National strategy to protect this species has contributed to the colony collapse at Buckroney and Kilcoole North. A small number left these areas an attempted to nest elsewhere at Portrane, Baltray and Kilcoole south. The remainder which is estimated at approximately 20% of the annual breeding pairs in Ireland aborted their efforts in 2025.

Figure 4: BK0 ♂ L0124 ringed as an adult 2022 returned to nest again L1625 with A9J♀ 2 eggs. Photo taken at Delta De Saloum, Senegal.

The Little Tern of Portrane

The early years

There are written accounts of little tern breeding attempts at Portrane beach prior to 1982 (Tern Programmes Launched, Wings magazine 1982). The then IWC recorded attempts at conservation at Portrane in 1992 and 1993. There are also personal records of conservation attempts between 1990 and 2017. It was during this period that the members of the Fingal branch of BWI fenced off a section of the beach using rope and fence posts. A number of signs were attached to the fence to inform the public about the conservation project. From 1990 to 2017 it is probable that chicks did fledge at Portrane, however the total number is likely to be no more than seven.

There are accounts from the 1970's that Little Tern nested to the south of the Island Golf Club. There are also records of them breeding on the north end of Bull Island. Sadly these sites are no longer being used for breeding purposes. This abandonment may well have been due to the

constant disturbance by the public of these nesting sites.
In both 2016 and 2017 the Fingal branch had monitored the arrival of Little Tern at Portrane. Unfortunately after the initial count of approximately 20 adults in late May of both years, this number dwindled to zero within a fortnight. Most of the adults were un-ringed. The few that had a metal ring were most likely to have been from Kilcoole. Of the 15 adult Little Tern trapped and ringed at Portrane in 2022 14 were sighted in 2023 at the 3 main east coast colonies. Little tern Darvic rings used in Ireland currently begin with I, A, B and C. However a small number of sightings beginning with H have been sighted. HC2 was trapped in Senegal in April 2023. It had been ringed as a juvenile at Kilcoole in 2021.
When I received a call from Paul Lynch (BWI Fingal) in May 2018 that he had counted 22 adult Little Tern at Portrane again, I said that I would take a look. I arrived in late May at the most southerly end of the old roped off area and scanned the area to the North. This area had been roped off by Fingal BWI branch members prior to 2016. What has happened since has been an education in conservation and a revision of the little tern canon. It should be noted that all of the breeding sites since 2018 have now been completely washed away.

The Season 2025

Figure 5: L3925 A0B ♂ reacts to the alarm call.

We had visited Portrane beach throughout the winter. Once again the sea had removed much of the 2024 nesting area. This year we observed the entrance to the lagoon to be much narrower than in previous years. The amount of shingle to the north west of the site had greatly increased. This area looked promising and it was hoped that both little tern and ringed plover would nest there. Our final visit post the spring tide of April confirmed our belief in that ringed plover had begun to nest at Portrane. At the time it was very obvious that at least 10 pairs of ringed plover were holding territories.

In 2025 we were able to establish the protection area in late April. Our installation date of the fencing was April 26th. We calculated that we would require 180 eight foot posts and 80 six foot posts to hold the rope, signage and netting. Having defined their breeding territories the ringed plover began laying eggs on the 14th of April. As usual our defences were set out with the external blue rope. The second layer was the black netting. The third and final was the electric fencing which was divided into four sections. From previous experiences with ringed plover and their chick fatalities we decided to hold off on the insertion of the green mesh until we believed that all the ringed plover had nested or re-nested. Thus any ringed plover chicks had un-restricted access to the beach and lagoon.

This year the little terns began to arrive at around the same time they had in 2024. Their early arrival of our breeding little tern had been anticipated. Our observations show that on April 20th we had 7 little tern adults on the beach. By the 30th there were 20+ little tern adults and 10 ringed plover nests with 30+ eggs. The same day at 08:00 hours the least tern was noted by Jan. The least tern spent most of April 30th at Portrane. A sweep of the site on the 10th of May revealed 30+ little tern and 16 ringed plover nests. Four of the ringed plover nests were outside the enclosed area. Unfortunately Corvid predation had also started. This year it was rooks that attacked first. They started at the north end and worked southwards. Hooded crows and their two newly fledged chicks would later join predation. Initially we would lose 14 of the 1st series of nests to these clever predators. We were able to deter their attacks during the day when wardens were present. However, the losses mounted during our absences or outside of our rostered times. Portrane 2025 began in earnest when our 1st little tern egg was found on May 17th.

Figure 6: Ringed plover fledged chick EJ from 2024

Notes from May 12th reveal that there were "LT's scraping in both the north and mid-sections of the restricted area. We would later name these areas as A, B, and C. The least tern was noted at 11:30 in the company of 2 little tern. Pairs of little tern began scraping at the south end or Area D on the 14th. May 17th at 14:40 saw 40+ little tern at Portrane with a small number on the sand bar at Rush point. Prospecting and scraping had started in earnest in areas A,B and C. By day's end we had our first little tern egg in area C. Notes from May 19th show that RP01 had hatched and its chicks were running about foraging at the tide line. Later they returned to the compound. RP02 was close to hatching and we logged a further 2 new or re-nesting locations in Area A and 1 in Area B. Observing Area A and Area B was very difficult due to the vegetation and the undulating nature of the terrain. We decided to reduce our visitations to Area A and Area B to check for nests to lessen our impact. Fortunately we were able to observe Area C from the western side of the lagoon. A check on Area C's birds indicated that a visit to this area might reveal that some of our little tern had laid eggs. The subsequent visit revealed that we had indeed 4 little tern nests and 7 eggs. The following day an evening check on the colony saw some more ringed plover begin to re-nest with their nest sites now numbering nine. Little tern sites were at 13 with an egg count of 20. On Sunday 25th a check on the colony revealed 19 LT nests with 41 eggs and 8 ringed plover nests with 29 eggs. Our colony was expanding and by Monday 26th L2825 was discovered.

Figure 7: BJ2 ♀ from L1225.

We had placed GoPro cameras on both little tern and ringed plover nests in order to identify and record who were nesting and where. When un-ringed or damaged rings on birds were recorded, traps were deployed. Biometrics were taken after trapping and both BTO and Darvic rings were attached. At least 22 adult little tern were processed in this fashion. Care was taken not to stress sitting birds and a time limit was set for trapping. As a result we were unable to ring 15 little tern adults. The 1st adult to be ringed was C47 who paired with AET on L1425 to produce CL8 and CN9. Both these chicks fledged. The number of little tern chicks trapped and BTO ringed was 85. Those who were Darvic ringed numbered 52. Eleven ringed plover chicks received BTO rings and three of those also received Darvic rings. Of the 14 ringed plover adults trapped in 2025, seven un-ringed birds were fully ringed. By June 3rd the little tern nests had increased to 39. Nests put down in Area A and Area B had been very difficult to locate and monitor. A kestrel began making occasional visits to the pines to the west of the colony. From there it took the opportunity to prey upon the colony. It took the occasional ringed plover chick but it was not considered a serious threat. At this time all 4 areas had brooding birds and our wardening resources were stretched to breaking point. We had 15 X 3egg nests, 19 X 2egg nests and 5 X 1egg nests. We noted on June 4th that both L1125 and L1325 had been abandoned. On Saturday 7th we had 91 little tern eggs. We noted that yet again we had 2 dumped eggs. Hatching began on June 9th with L0425. Everything seemed to be going well with the project but all was about to change in the coming days.

Figure 8: BJ2 ♀ from L1225 feeding 1 of 3 chicks.

By the 10th we had put a BTO ring on our 11th LT chick. Up until then we had had a small number of sparrowhawk, kestrel and peregrine attacks.
From our records on June 16th we noted that there were 2 female kestrel, 1 male kestrel, 4 sparrowhawk and a peregrine hunting in our area. The sparrowhawk pairs clashed and it appeared that our resident rodent specialists won out. It was at this time that we started getting very close attention from the non-breeding female kestrel. We noted that early morning this bird flew into one of two favoured places in the pines. From there it scanned the colony selecting a target. Once its prey was selected it launched itself in a low trajectory at its target. If it was unimpeded it generally succeeded in taking a chick back to the pines for consumption. It seemed to be aware that there were plenty of chicks available for consumption within the site. On occasion when it failed to locate prey from its observation points it would attack the colony anyway. It would then land within the colony and wander about in search of prey hoping to flush its next victim. When we had wardens on site we were able to interrupt this behaviour. When we were absent the kestrel was free to exploit our colony. We asked for assistance in dealing with this major problem. However due to legislation there is an unwillingness by the government agencies to deal with rogue kestrel behaviour.

Figure 9: BA9 fledged from L0223 and would nest successfully on L2924 and again on L2625.

This rogue interfered with our biometric processes as it would target any disturbed chicks when we entered the colony. On two occasions the kestrel took little tern chicks in front of wardens who were on a ringing expedition. To avoid further losses we restricted our visits to the colony to when we believed it was safe to do so. Thus the wardens were forced into a policing action with our only defence being the constant use of air horns and whistles during attacks. The kestrel's attacks were relentless and it decimated the ring plover chicks and culled over 40% of our little tern chicks. Soon afterwards we were forced to curtail our nest checking and ringing programme. Under normal circumstances we would BTO ring chicks on the scrapes every second day. The level of predation forced restrictions and this resulted in a number chicks being either un-ringed or only partially ringed. We also noted this year that when the chicks hatched the parents were quick to move them to a safer location. This may have been due to the threat from the kestrel.

The decision to curtail the ringing programme meant that when it came to fledging we noted that at least 3 of our fledglings were un-ringed. At the time we were able to ascertain that the un-ringed fledglings were ours by their level of development. Our resident sparrowhawk were feeding their chicks. The male sparrowhawk hunted the farmlands of Rush. They still preferred rodents. There were many times when the sparrowhawk carried its prey back over the colony towards its nest. On at least 2 occasions it was ambushed unsuccessfully by the rogue kestrel. This year our fledglings moved to Rush point as soon as they were capable. This behaviour may have been a precautionary defence against the kestrel.

Figure 10: BK6 ♀ being fed by IZ9 ♂ on L3725 3 chicks un-ringed

The Portrane little tern colony had reached 80+ adults on June 8th. L4125 and L4225 were found on June 17th. We now had 48 little tern chicks. On June 19th L3125 hatched and both chicks received BTO rings. Both chicks weighed 8.5grms each. The kestrel had become a menace and it was testing the resolve of the wardens. The attacks continued and the losses mounted. Good news came to us from Kilcoole. BA9 our first year breeder from 2024 produced two chicks one of whom is C37. C37 as a one
year old was sighted in Kilcoole on June 22nd. The kestrel seemed to be targeting the younger chicks of both ringed plover and little tern. On the 28th CV9 who was close to fledging was attacked by the kestrel. The weight of the chick was such that the kestrel struggled to get airborne. Meanwhile the adult little terns mobbed the struggling predator. The wardens joined the melee. The kestrel let its prize go and took flight. Despite the ordeal CV9 survived and would be recorded as a fledgling in early July. Once again the spectre of high spring tides had to be considered. L4225 and L4325 were moved and raised. The night of the 25th and the 26th were the critical high tides. Although the electric fencing was breached on the 25th there were no losses. The sea had gone around L4225 but all was intact. Despite this we moved it again and the parents settled again. The close proximity of the electric fence and the black netting meant that we were unable to safely move both nests further away from the high tide mark. Unfortunately the tide of the 26th ran higher due to lower air pressure and a south easterly

wind. The sea breached area D and area C and even went around the tent. L4225 was washed away with no trace of the eggs. L4325 was intact and our confirmed fledglings numbered 19. Notes from Wednesday 25th revealed that 2025's project had produced 16X3 egg nests, 24X2 egg nests, 5X1 egg nests and 3 dumped eggs. Between infertile and abandoned eggs we calculated that we had 23 eggs yet to hatch. We considered that the last egg would hatch on July 15th. Based upon this date we estimated that our last chicks would fledge during the first week of August. Early on the morning of June 29th a number of fledglings were noticed on the shoreline. On Friday the 11th July our final nest L4625 was found during a chick sweep in Area A. It was in an area that was very difficult to observe and unfortunately it had be abandoned.

Figure 11: Scanning the sky for danger

The morning of July 3rd revealed the predation by a fox of L4325 and we were down to seven eggs but we had 31 fledglings. By end of shift we had 41 fledglings. L4125 hatched on the 9th of July and both chicks were BTO ringed. The final egg from nest L4425 hatched on Saturday July 12th. By Monday the 14th the last of the little tern chicks were predated and our Portrane 25 project was coming to a close.

It should be noted that ringed plover chicks must find their own food. As a result they wander far and wide in search of food thus placing them in easy reach of their predators. Despite the presence of the parent birds they have little chance of survival. Predation continued apace and the ringed plover were taking a pounding. Those that had lost their first nests (12+pairs) had re-nested. Despite hatching not one chick survived to the fledging stage. A third attempt was made by at least 8 pairs. All of the chicks from the third hatching perished. More ringed plover nests appeared and they in turn hatched. Once again as the chicks dispersed they were picked off. The answer to the question of why the ringed plover nest early may be an avoidance strategy towards predation by birds of prey. It is thus essential that a predator management scheme be implemented as early as possible to avoid early nest predation. This methodology would likely prevent the later losses incurred by re-nesting parents.
One of our Portrane 2025 little tern fledgelings, CN2, was recorded on September 9th at Ria de Foz (estuary of the Masma river) in northern Spain. On checking our records we know that CN2 was born to Mom C19 and Dad AZX with siblings CN3 and CN5 on nest L1725. Both CN3 and CN5 also fledged from Portrane 25. Further news of Portrane birds abroad came to us on the 20th of October. Formally A9H, BK0 was found at the Delta De Saloum, Senegal. It was first recorded at Portrane on nest L0922 with IZ8, with 3 chicks (B1J, B1D, B1H) lost (probably lost to predation). It returned to Portrane to nest on L0323 with IZ8, with 2 chicks fledged (BA5, BH8). In Portrane 2024 on nest L0124 with A9J, with 1 chick fledged (BZ5) and 1 infertile egg. This year on L1625 with 2 chicks fledged (CL4, CL2).

Figure12: A9J ♀ born 2014 Baltray 3rd time breeding Portrane L1625.

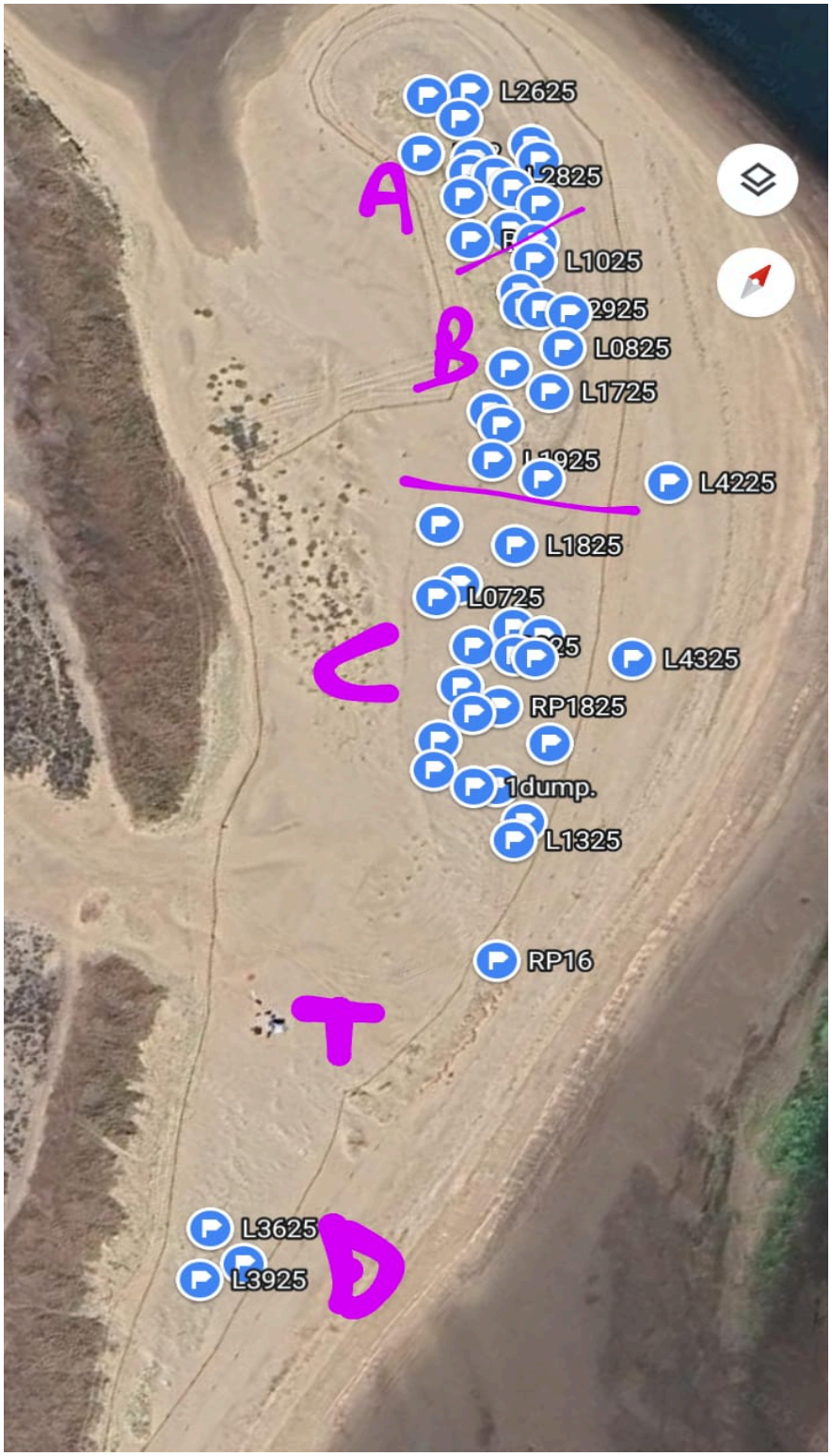

Figure 13: 2025 sites

Nesting standards

When we started our 13 hour roster programme in 2018 we started a process that has led to the following code for the little tern nests. The example L0719 may be decoded as follows. L = little tern, 07 = the 7th located nest in the season, 19 = the year of the project. Re-nests are registered as follows R0520 R = little tern, 05 = the 5th located re-nest in the season, 20 = the year of the project. This year we continued to label the Ringed Plover nests in the vicinity of the site in a similar fashion. This process was started in May as part of an attempt to identify and if possible ring the adult Ringed Plover and monitor their progress. The label pattern RPXXYY was used again. It was hoped that this label pattern would allow us to identify parent and chick relationships within the Ringed Plover breeding pairs. Because of their breeding strategy it is far more difficult to identify Ringed Plover family units. To refer to Ringed Plover as a colonial species is problematic. The area that breeding pairs occupy is jealously protected with both genders participating in its defence.
As the Ringed Plover chicks are precocial (young ready to leave the nest almost immediately) they wander about the beach upon hatching. Ringed Plover adult's duties are then confined to watching over their offspring as they feed along the shoreline. There are many dangers for the wandering chicks on the shoreline. Laurus sp. and corvid sp. hunt there and all of our resident raptors criss-cross the area searching for an easy meal. Other problems encountered by chicks occur when they stray into other Ringed Plover territories. However when external threats are encountered warning calls are repeated throughout the nesting area by all adults. In this way the Ringed Plover are the sentinels for all of the breeding birds at Portrane.

Table 1: Ringing and Outcomes for Ringed Plover

Name	♀	♂	Number of eggs	Number of eggs hatched	Result	Comment
RP01			4			2 fledged
RP02			4			1 fledged
RP03			4	4		predated
RP04			3	3		predated
RP05			4	4		predated
RP06			4	4		predated
RP07			4			predated
RP08			4			predated
RP09			3	3		predated
RP10			4	4		predated
RP11			4	4		predated
RP12			4	4		predated
RP13			4	4		predated
RP14			4	4		predated
RP15			4	4		predated
RP16			4	4		predated
RP17			4	3		Re-nest predated
RP18			4	3		Re-nest predated
RP19			4	3		Re-nest predated
RP20			3	3		Re-nest predated
RP21			4	4		Re-nest predated
RP22			3	3		Re-nest predated
RP23			4	3		Re-nest predated

N.B. Of the re-nests 10 chicks in an advanced stage were seen on the beach.

Portrane beach and site 2018-2025

The entire beach and dune/saltmarsh of Portrane beach is classified as a Special Area of Conservation (SAC) and a Special Protection Area (SPA) National Parks and Wildlife Service (NPWS). It is thus a protected area by law. The area also falls within the jurisdiction of Fingal County Council (F.C.C.) and is also protected by their bye-laws. At high tide the area becomes a peninsula with The Burrow to the West and Rogerstown outer estuary. The outflow of the Ballyboghil and Ballough rivers are the main two feeders. There are also Bride's Stream, Jone's Stream and Baleally Stream feeding the estuary. They flow from the surrounding farmland and feed a deep channel to the sea to the East.
Prior to 2018 BWI Fingal had an area of shingle beach cordoned off with 2 meter poles 10 meters apart with a single connecting blue rope 90-100 cms high. The site's length was 150 meters north-south 40 meters East-West. The signage attached was bleached with age but was still serving Bird Watch Ireland (BWI), BWI Fingal and FCC. The sands of time had buried the western side to the extent that the rope was 20 to 30 cms from the ground. The other 3 sides still had purpose. This area was referred to as the old area. By 2023 all of the area to the southern and eastern ends of the beach had been washed away, by high tides. All of the previous year's nesting areas are now under water at high tide. Most of this year's site did not exist as a shingle beach in 2018. The Portrane site is subject to very high tides and is vulnerable to annual inundation in July. The intertidal area has changed again this year. Erosion and shifting sands had re-modelled the exposed area at low tide. There is now a substantial slope in front of site. At certain tidal times this slope would prevent us from observing the little tern along the shoreline. The base of the slope was pock marked by intertidal pools and ridges. The area further out was covered by a fine sand cut by draining water. There was small shingle area adjacent to the river. In 2025 the site stretched further north and west. The shingle area suitable for nesting in 2025 was even larger than in 2024. The northern Area A which bordered the river and Area B to its south were deemed to be prime nesting sites. These areas contained shingle, stone and vegetated spaces. To the south of Area B lay a lower Area C consisting of pure shingle. It was believed that this area would be at risk of flooding. Finally there was Area D which was similar to Area C but contained a higher portion of sand. Area A contained 14 nesting sites. Area B also had 14 sites. Area C contained 21 and Area D had 3.

Functions of wardens.

Monitoring the arrival of Little Tern at Portrane began in mid-April. However, following the erection of the fencing the warden's duties included the checking of the external netting for any night-time activity by predators. At first the daily visits were to take counts of Little Tern and observe what other species were nesting and the type and number of predators that were in the area. The activation of the on-line roster was held off for as long as possible. This was done in order to conserve our resources for the actual breeding season. Again the roster was activated when the little tern started scraping.
The flora and geography of the site this year made it impossible to observe the majority of the nests in Area A and Area B. Data collection in 2025 was even more curtailed than in former

years. Because of our experiences in 2024 we were unconcerned with the early arrival of the little terns. It was noted that this year for the majority of the breeding season sand eel was the main food source. A small amount of sprat was also fed to chicks and brooding adults. Of the observations made of the food brought in to the chicks and adults it was noted that the food supply was as good as in previous years.

Ringed Plover nests were checked regularly to make sure that were intact. We still adhered to the observation processes that were used in previous years. Those who were new to the collection of data this year were given a very basic outline on data collection. “This is the nest you will be recording, note down everything you see”. We take this approach so as not to influence the type of data being collected. Data collection and the processing of that data carries with it the value of the observer. Much of the data collected is similar however if the procedures are too restrictive we might overlook behaviours that might otherwise be revealed. From our records “When eggs are being laid down there is a time when the observer notices the laying adult that is sitting exchanges her position with her male counterpart”. This is the moment when we know when incubation starts. We can then calculate the approximate hatching date. As this day approaches we intensify our observations and in certain circumstances video trail cameras were installed. The adult’s behaviour alters during the period of actual hatching. Shell removal does not occur immediately after hatching. The data collectors other duties pre-hatching included the length of time adults spent sitting, the time changeovers occurred and whether feeding took place. Post hatching the documentation of feeds to chicks is of paramount importance. This data informs us about the food supply and its quality. It also informs us about the hunting capabilities of the parents and the likelihood of the chicks fledging successfully.

In order to simplify this data recording as much as possible we continued with the standardisation of fish sizes (small, medium and large) that were based upon the length of the bill of the adult little tern. Thus a small fish feed was any fish that was smaller than the adult bill length. Post ringing the identification of recipients was also recorded where possible. In 2025 the identification of the recipient was almost impossible when the chicks became more mobile. For most of June and July wardens were looking outwards and not at the colony. On those occasions we were able to observe all that the observer saw was the adult deliver a fish to a location hidden by vegetation and depart without any. Nest observation can become a tedious task. In order to ease the boredom some of those on protection duty exchanged roles with certain data recorders.

Protection duty always held the highest priority thus in emergency situations wardens were permitted to enter the site to ward off avian predators. The only other occasions where we entered the site were to insert or remove cameras or recording devices. During the ringing sessions in order to minimise the disturbance we created a procedure for these and future events.

Nests were targeted for ringing based upon the age of the chicks. Little Tern chicks at 2 days old or less were targeted for BTO metal ringing. Chicks at this age are never far from the nest site and thus we can register family groups intact. This year we noted that little tern chicks weighing more than 20grms are large enough for Darvic ringing.

Ringed Plover chicks were treated differently because of their higher mortality rate. Both types of rings were attached at a later stage in their development. Chicks were deemed ready for BTO

ringing when they were more than 8 days old. ringed plover chicks received their Darvic rings at about 14 days old. To assist us in chick, nest and parent relationships we decided again in 2025 to attempt to ring all adults that had only a metal ring or were un-ringed. Camera traps were set during the day to identify potential targets. Those birds that had Darvic rings were checked for wear and tear and their numbers recorded. Jan built more traps and these were used very successfully on the nesting little tern adults. Again some adult birds seemed to know that a trap had been set and they simply refused to brood. When this occurred we moved the traps to other possible candidates. It is hoped that the practice of ringing will aid us to create an historical profile/map of relationships at the Portrane site.
Due to the threats experienced in 2025 we only photographed a sample of the nests. In 2025 we again took a sample of eggs that were weighed and measured to add to our data file on egg production. Due to the threat of attack we curtailed our ringing policy. From our 2025 observations there is still much that we have yet to understand. We are in a sense a service provider for the avian species that choose to spend their summer at Portrane. The total amount of hours spent wardening by the team was again in excess of 2000 hours this year.

Figure 14: Site construction

Site Construction and Signage

This year the area of shingle beach adjacent to the river was cordoned off as per normal. With the aid of the contractor 2.5 meter poles were placed 10 meters apart for the external rope fence. Again most of the netting fencing was also supported by 2.5 metre poles. These poles were inserted to a depth of 1.80m. This year we used 180 2.5 metre poles. We also used a further 40 1.85 metre poles to complete the netting section. These were inserted to depth of 1m. The netting in 50m and 100m lengths were attached to inner line of poles with the base of the netting buried beneath the sand to discourage predators. The site's inner netting perimeter was approximately 1000 meters in circumference. The widest section was between 70 and 75 meters at its widest East-West. We would have no need to extend the initial area as laid out. We would discover 6 ringed plover nests outside of the site. The 2 little tern pairs that nested outside the site were moved but unfortunately the tide took one and a fox predated the other. Each post had plastic spikes attached to deter perching by corvids and other predators. Signage was attached to every second post. This signage is used to inform the public about our project and has the backing of Bird Watch Ireland (BWI), BWI Fingal, NPWS, and F.C.C. A number of signs were strategically placed beyond the site asking the public to maintain a 10 metre distance from the netting. Our relationship with our local neighbours has never been so good. Most of the public were very supportive but unfortunately a small number did not stay 10m out from the netting. Some walkers found it necessary to step through the perimeter rope to peer at the site. Having disturbed the colony some even proceeded to photograph the flying birds. We erected an outer rope 10m outside of the netting. This year thanks to F.C.C. we added to our signage content. There are a number of public access points to Portrane beach and informational signs were placed at these locations. Again in 2025 we used both wooden and plastic shelters to offer the chicks some protection from the weather and predators. We must thank Wavin for their support in providing extra plastic piping gratis.
The blackboard has become the most important source of information for the project. The blackboard was placed at the eastern side of the site betweenArea C and Area D. Information about the project's progress throughout the season was updated on a weekly basis. It should be noted that the blackboard should be kept up to date in order to maintain its credibility.

The Site 2025

Erosion

Compared to the 2024 site it was obvious that the entire site had transformed yet again. The northern end as in previous years had extended north and west. Once again the eastern side of the site was greatly eroded. At its widest point the dunes separated the lagoon from the beach by two metres. It had shrunk to 20 metres in length. The black netting had to be placed to the western side of this narrow strip. The previous 2025 spring tides had removed any possibility for a successful nesting area for either ringed plover or little tern on the eastern side.Yet again as in 2024 a shallow trench had been created by the tides to the east of Area A, Area B, and most of Area C. This trench would fill with water with tides greater than 3.8 metres. The sand bar that occasionally remained was used by roosting and grooming birds. However it became a death

trap for Ringed Plover chicks when the incoming tide was greater than 3.9 metres. The trench was situated east of the netting. This year, two pairs of little tern nested in this area. Both (4 eggs total) unfortunately were lost. All four Areas were initially devoid of vegetation, and looked highly vulnerable to predation. After some heavy rains there was an explosion of growth which gave some cover to the hatched chicks. Both ringed plover and little tern nested in all four areas.

Figure 15: BHX ♀ paired with BJ0 ♂ 2 chicks CZ2 C0D from L3125

Predator Management

We who volunteer at Portrane do so with the intent of protecting the breeding strategies of little tern, ringed plover, skylark and meadow pipit. The idea of having an active predator management scheme has never sat easy with us. Because of our geographical location at the end of the Donabate peninsula any significant human development that displaces wildlife in the area has a direct impact upon us. What are effectively wildlife refugees are pushed towards us. We first experienced this phenomena in 2019 when the Donabate bypass was developed. This year the large housing developments at Donabate has pushed these refugees towards Portrane. Jackdaws (*Corvus monedula*) were the main predator of 2018 but were not a threat for most of 2025. Red foxes (*Vulpes vulpes*) were successful in predating one of two little tern nests outside our perimeter. The last of our little tern chicks seven in total were taken by a stoat. There was also a report of a mink at the East end of the outer estuary. As the colony has expanded yet

again, the necessity for a re-appraisal of how we warden the site is required. A 24/7 service for the duration of the project is essential for the future success of the project. Future discussions with NPWS (R Mulraney) and F.C.C. (H Visser and L Bull) will be required to resolve this issue for Portrane. Prior to this year's project we purchased more "fox lights" that we believe are a deterrence to night predators. The size of this year's colony and site will require more of these lights. In 2025 we created three independent electric fencing systems rather than one large system. This deployment of electric fencing this year contributed greatly to the defence of the colony. It is hoped that future funding from the NPWS will enable us to purchase the electric fencing system necessary to protect the growing colony. We followed the advice of our Baltray friends and used a patchwork system similar to that used at Baltray. The electric fencing was activated for night time usage only and was used as a second line of defence. Daytime wardens carry air horns and whistles to ward off avian predators. Avian predators at the Portrane site include sparrowhawk (*Accipiter nisus*), kestrel (*Falco tinnunculus*), peregrine (*Falco peregrinus*), and buzzard (*buteo buteo*). Ground predators this year included fox, mink, stoat and roaming dogs.

Public Awareness

Interaction with beach users

There are different types of visitors to the beach at Portrane. There are the residents of the burrow and regular walkers who frequent the beach. They have an understanding of what we are about. Many now take an active interest in what is happening at the colony through regular interaction with wardens. Those who walk their dogs have come to recognise the disturbance caused by the dogs near to the colony. There are the anglers who visit the area in numbers particularly at the period around spring tides. Despite being in close proximity to the colony they have little effect upon it and the birds seen to ignore them. Many of the anglers would stop and chat about the colony and how well it was feeding.
There were a small number of holiday makers from the caravan park. Unfortunately we had two visitors one of whom returned a second and third time. This individual (a dog owner) seemed to want a confrontation but finally went away when they were ignored. The other individual was extremely abusive. They happened to target us during a period of attacks by the kestrel. On two occasions during the midweek cover when the tide was in close a walker ducked under the rope which caused the colony to rise. We had two joggers this year who used the seaward side of area D as a signal for sprinting. This was only a problem when area D was active. This year yet again we had a number of least tern seekers from outside of the country. These individuals were well behaved. Unfortunately the least spent much of its time somewhere else. One individual birder was reproached for leaning over the rope in an attempt to photograph little tern adults. The birder was unaware that their presence was preventing adult terns from brooding.

Table 2: Colony output, nest fledging times and outcomes.

Nest number	Number of eggs	Hatch date	Fledged date	Number of days	Ring number	Nest outcome
L0125	1					Infertile
L0225	2	13/06/25	01/07/25	18	CX0,CL6	Fledged
L0325	2	09/06/25	01/07/25	22	CX1,CL5	Fledged
L0425	2	10/06/25	03/07/25	23	CV6,CV8	Fledged
L0525	3	10/06/25	30/06/25	20	CX5,CX6,CL9	Fledged
L0625	2	10/06/25	30/06/25	20	CX3,CX4	Fledged
L0725	3	10/06/25	30/06/25	20	CX2,M,M	CX2 Fledged
L0825	3	13/06/25	03/07/25	20	CL7	Fledged
L0925	3	13/06/25	03/07/25	20	CV4,M,M	CV4 Fledged
L1025	3	14/06/25	03/07/25	19	CN4,CN7,U	CN4 CN7 Fledged
L1125	2					Abandoned
L1225	3	13/06/25			CL0,M,M	
L1325	1					Abandoned
L1425	2	13/06/25	02/07/25	19	CL8,CN9	Fledged
L1525	2	15/06/25			CP0,M	
L1625	2	13/06/25	30/06/25	17	CL4,CL2	Fledged
L1725	3	13/06/25	03/07/25	20	CN2,CN3,CN5	Fledged
L1825	2	19/06/25			U	1 Infertile
L1925	3	13/06/25	03/07/25	20	CV7,CN8,M	CV7,CN8 Fledged
L2025	3	15/06/25	05/07/25	20	CP1,CN6,U	CN6 Fledged
L2125	3	21/06/25			CXS,C70,U	
L2225	1	13/06/25	03/07/25	20	CP5	Fledged
L2325	2	17/06/25			C71,M	
L2425	3	21/04/25			M,U,U	
L2525	2	13/06/25	30/06/25	17	CL3,CL1	Fledged
L2625	2	17/06/25			M,M	
L2725	3	17/06/25	07/07/25	20	CX7,CZ3,M	CZ3 Fledged
L2825	3	15/06/25	05/07/25	20	CN0, CN1, M	CN1 Fledged
L2925	1					Abandoned
L3025	3	21/06/25			M,M,None	
L3125	2	19/06/25	08/07/25	19	CZ2, C0D	C0D Fledged
L3225	2	23/06/25			CP4,M	
L3325	3	28/06/25			CP6,M	
L3425	2	27/06/25			CP8, CP7	
L3525	2	27/06/25			CP2,M	
L3625	2	27/06/25			C0E,	

L3725	3	28/06/25				
L3825	3	23/06/25			CP3,	
L3925	2	01/07/25				
L4025	2	25/06/25			C0B,	
L4125	2	09/07/25				Predated stoat
L4225	2					Washed away
L4325	2					Predated fox
L4425	3	11/07/25				Predated stoat
L4525	2	11/07/25				Predated stoat
L4625	2					Abandoned

Note: U = unringed, M = BTO metal

Little Tern development to adulthood.

The next 4 pictures show a first year bird in full adult plumage.

Figure 15: C07 hatched from L2824 nesting on L4425.

The next 3 pictures show a second year bird still with some juvanile plumage.

Figure 16: BC9 born L0423 still showing juvenile plumage on L4525

The canon around the standardisation of avian development does not rest easily with what happens at Portrane. Once again we have discovered something that does not fit. From the above photographs we have a 2nd cycle individual that still has juvenile plumage and a 1st cycle bird that has undergone a complete molting process.

Colony numbers and why we monitor.

One of the advantages of the size of the colony at Portrane is that it is easier to get a reasonably accurate count of the colony. For the breeding season of 2025 we had a total of 46 pairs of little tern plus 5 non-breeders and a least tern (*sternula antillarum*). Again we had 16 pairs of Ringed Plover. A note for the future is that we wish to identify and process all of our adults. We need to identify un-ringed adult Little Tern and Ringed Plover as soon as possible. To do this we need 2 more Go-Pro cameras so that we are not overwhelmed by any increase in colony size in 2026. We also need to co-ordinate their use and centralise the recovered data.

The placing of Darvic rings on our adults and chicks enables us to identify individuals. Through our Go-Pro observations of the nesting pairs, we are able to identify who they are, who they associate with, who they produce and where they go. In order to target those adults that are un-ringed or incompletely ringed. The data gathered helps us establish a history of breeding birds. When we ring chicks we are able to construct family structures within the colony. Through external observation we can track the movements of ringed adults and fledglings along the east coast. Daily observations of the colony permit us to establish when brooding commences at a family level for the majority of our pairs. This information provides us with an estimated hatching time. Once we have established who is sitting on a scrape, we can then move the cameras to other nest sites. Later we can return the cameras to observe the hatching and initial feeding of the chicks. With this information we can calculate the mean average of the incubation period of our colony. In 2025 the incubation periods were not as widely varied as it was in 2024. For the future the data could be mined to provide more detailed information on hatching, egg shell disposal through to the first feeding of chicks. Spare battery packs for the cameras would also increase the efficiency of data collection.

Nesting locations, Incubation period and clutch sizes

The nest/scrape sites at Portrane are typical in that they are a bare scrape in the shingle. In comparison to ringed plover the little tern scrapes are shallower. It has been our experience that little tern seldom have a nest that is decorated. It has been recorded that little tern usually have between two and three eggs but on rare occasions four. Whereas ringed plover have mainly clutches of 4 eggs with the occasional 3 egg nest.

In was our belief there was a direct link between the incubation period and the number of eggs being incubated. However, our experiences of the seasons at Portrane adds a number of caveats to this statement. Our experiences to date noted that inexperienced breeding birds do not always get it right and thus their immaturity may contribute to a delay in incubation time. Likewise experienced adults are likely to have shorter incubation times. Our observations in 2020 revealed a wider spectrum of incubation times than in 2018. Ehrlich et al suggest that incubation periods vary from 18 to 21 days. In 2020 however we have records of 22 day incubation periods. We are fortunate to have a small colony and these observations are not too difficult to collect. Interestingly Ehrlich et al suggest a general fledging period of 19 to 21 days but add a cautionary “(15-18)” possibility. 2020’s fledglings IV0 to IV5 were most definitely in the 15-18 group whereas IV7 and IV8 were 21 to 22 days. We can safely discount food supply or weather as influencing factors. Portrane has more than enough sand eels, shrimp, and other small fish for both the colony and other tern species that visit. In 2025 the shortest fledging period this year on L1625, L2525 was 17 days, whilst the longest on L0425 was 23 days. We mapped out the the site and inserted both the little tern and ringed plover scrape locations see *Figure* 13.

What unfolded in 2025 at the North end of Portrane beach from April through to mid-July added another chapter to the conservation of Little Tern in Dublin. Our work this year has once again done much for the conservation of ringed plover at Portrane.

How we measure success

At Portrane, only those chicks seen in flight are considered fledged. Hence this year we have 41 little tern and 3 ringed plover fledglings. In 2025 our data collection was curtailed due to the threat from predation. This year we spent more time on the ring-reading of both plover and tern. Over 364 different Darvic rings were read from over 818 sightings in 2025. We have estimated that we had approximately 40% per cent of the breeding adults recorded at the 3 main East coast colonies. The following is a list of Little Terns that were born at Portrane and bred at Portrane in 2025. The following males recorded were IZ5, IZ7, A0Z, A2Z, IZ9, BH7, A0B, IX1, females, IZ8, A1H, BJ2, A0P, C45, IX0, BA9, C07, BC9. It is always important to reflect upon the reasons as to why we do what we do regarding ringing. In 2018 I was very unsure about ringing little tern. Many questions were asked as to the benefits of such practices. However the knowledge we have gathered from our ringing programme has allowed us to understand our charges better. Since our ringing programme began in 2018 we have observed several one-year old chicks returning to Portrane. Because of our ringing programme we were able to ascertain that in 2024 we had one year old BA9 female breed successfully at Portrane. Our records from 2025, show that IZ8 added CX3 and CX4 to her list of fledged chicks. Through trial and error we have learned the optimum position to place cameras on our nests to assist in the monitoring of our breeding pairs.

The majority of chicks that complete their migration south make it past year one. The vast majority return to these islands in their second calendar year as non-breeding birds. However a tiny percentage of females do return in their first cycle to breed as experienced at Portrane. The majority as second cycle birds they return to various breeding sites throughout these islands. At Portrane they fly about as what are referred to us as teenagers. They do so in groups varying from 2 to as many as nine. Some of the females partner with older birds. Most however imitate their older counterparts in most activities with one exception, they seem unable to settle and breed successfully.

We have no idea which of our 41 2025 fledglings will return next year to breed or where they might breed. From a statistics perspective our team of volunteers have had success in facilitating the colony in 2025. In 2025 we added a minimum of 41 little tern to our fledgling list. Unfortunately we lost 53 eggs and chicks to predation and tide. Portrane's little tern colony has established itself as an efficient and effective reproducer of little tern on Ireland's east coast. We believe that due to the excellent supply of food at Portrane this year's chicks have an excellent chance of returning to breed in the years to come.

Table 3: A History of Little Tern breeding at Portrane

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of breeding pairs	11	18	05	11	24	17	31	46		
Number of eggs	27	44	12	26	57	35	80	106		
Number of eggs lost	09	17	00	00	29	21	12	16		
Number of nests lost	22	41	00	00	08	11	3	2		

Number of re-nests	06	03	00	00	06	0	0	0		
Number of re-nest eggs	12	05	00	00	09	0	0	0		
Number of re-nests lost	01	03	00	00	04	0	0	0		
Number of re-nests eggs lost	02	05	00	00	05	0	0	0		
Total eggs laid	39	49	12	26	66	35	80	106		
Total eggs hatched	15	03	12	26	37	14	68	90		
Total eggs fledged	14	03	09	24	06	13	53	41		
Total chicks ringed	13	02	08	25	31	13	68			
Mortification of chicks	01	00	03	02	31	01	7	49		

N.B. 2018 statistics are based upon an estimation of the original nests lost added to the actual output,

Table 4: Families and outcomes for Little Tern 2025

Nest	♀	♂	Chicks		
L0125	A8T	IZ7		Family of 1 egg infertile	
L0225	M R	A2Z	CX0	Family of 2	
			CL6		
L0325	A9K	C65	CX1	Family of 2	
			CL5		
L0425	BK2	M L	CV6	Family of 2	
			CV8		
L0525	A1H	C48	CX5	Family of 3	
			CX6		
			CL9?		
L0625	IZ8	B0B	CX3	Family of 2	
			CX4		
L0725	A8Z	BC4	CX2	Family of 3	
			R		
			R		
L0825	Unk	C69	CL7	Family of 1	
L0925	A8S	IZ5	CV4	Family of 3	
			R		
			R		
L1025	C78	A67	CN4?	Family of 3	
			CN7?		
			?		
L1125	Unk	Unk		2 eggs abandoned	
L1225	BJ2	A0Z	CL0	Family of 3	
			R		
			R		
L1325	Unk	Unk		1 egg abandoned	
L1425	C47	AET	CL8	Family of 2	
			CN9		
L1525	C45	C67	CP0	Family of 2	
			R		
L1625	A9J	BK0	CL4	Family of 2	
			CL2		
L1725	C19	AZX	CN2	Family of 3	
			CN3		
			CN5		
L1825	C64	Unk		Family of 1 + 1 Egg Infertile	

			C64		
L1925	B0X	IN1	CV7	Family of 3	
			CN8?		
			R?		
L2025	IX0	Unk	CP1	Family of 3	
			CN6		
			U		
L2125	C46	C54	CXS	Family of 3	
			C70		
			U		
L2225	BC5	Unk	CP5	Family of 1	
L2325	A9C	C81	C71	Family of 2	
			R		
L2425	C66	M R	R	Family of 3	
			U		
			U		
L2525	C22	IX1	CL3	Family of 2	
			CL1		
L2625	BA9	A9B	R	Family of 2	
			R		
L2725	BK3	A9I	CX7	Family of 3	
			CZ3		
			R		
L2825	C53	Unk	CN0	Family of 3	
			CN1		
			R		
L2925	M L	BK7		1 egg abandoned	
L3025	ABV	C80	R	Family of 3	
			R		
			U		
L3125	BHX	BJ0	CZ2	Family of 2	
			C0D		
L3225	C82	Unk	CP4	Family of 2	
			R		
L3325	Unk	BK1	CP6	Family of 3	
			R		
			U		
L3425	C21	Unk	CP8	Family of 2	
			CP7?		
L3525	UnK	Unk	CP2	Family of 2	
			R		

L3625	BK4	BT0	C0E	Family of 2	
			R		
L3725	BK6	IZ9	U	Family of 3	
			U		
			U		
L3825	C30	Unk	CP3	Family of 3	
			R		
			R		
L3925	Unk	A0B	U	Family of 2	
			U		
L4025	M R	A8J	C0B	Family of 2	
			U		
L4125	M R	Unk		Family of 2 Predated	
L4225	C27	M R		Family of 2 Washed away	
L4325	M R	B7Z	U	Family of 2 Predated	
			U		
L4425	C07	BH7	U	Family of 3 Predated	
			U		
			U		
L4525	BC9	Unk	U	Family of 2 Predated	
			U		
L4625	Unk	Unk		2 eggs abandoned	

In Table 4 above ??= Kilcoole 24 birds ??= Portrane born 16 birds ??= Portrane ringed 24 birds ??=Gronant 1 bird ??= Isle of Man 0 birds ??= Baltray 6 birds. Birds of unknown origin 20.

Sightings and re-sightings

For convenience of reporting, sightings of Darvic ringed birds at Rush Point and Portrane are considered as one area. This year over 818 sightings from approximately 364 birds were recorded by Daniele Gioppo, Paul Lynch, Jan Rodd, Gary White and myself at Kilcoole, Baltray, Buckroney, Gormanstown, Mosney, Laytown and Portrane/Rush roosting sites.

Biometric data

At Portrane 2025 biometric data was collected on ringed plover adults and chicks and little tern adults and chicks. Biometrics are collected only at ringing sessions to reduce any possible stress or disturbance to the nesting birds. The data below represents a total of 72 biometric readings

of Little Tern adults and chicks and 13 of Ringed Plover taken on adult birds this year during the ringing sessions. This data will be added to the pool of data that we already have collected.
In Table 5 below it should be noted that male adult BK0 is an extremely heavy adult.

In Table 5 below (♀) = Female (♂) = Male (Unk) = Unknown.

Table 5: Little Tern adult biometrics

		L T Adults		
Date	Wing	Weight	Darvic Number	Gender
06/07/2025	177	49.1	BC9	
26/05/2025	176	52.5	C47	♀
26/05/2025	185	52.6	BK1	♂
26/05/2025	175	65.3	BK0	♂
27/05/2025	180	56.0	BJ2	♀
27/05/2025	170	48.9	A67	
27/05/2025	179	53.7	C45	
31/05/2025	180	55.5	BC5	♀
31/05/2025	178	51.6	C46	♀
31/05/2025	176	55.8	C53	
02/06/2025	179	57.7	C54	♂
05/06/2025	171	50.5	C64	
05/06/2025	178	54.6	C65	
07/06/2025	176	49.6	C66	
07/06/2025	176	51.5	C67	
07/06/2025	178	51.3	C69	
07/06/2025	175	50.0	C30	♀
10/06/2025	176	51.9	C78	♀
10/06/2025	178	54.4	A8J	
13/06/2025	186	51.8	C80	♂
14/06/2025	183	57.7	C81	♂
14/06/2025	173	55.5	C82	♀

Table 6: Little Tern chicks Biometrics and Rings

		L T Chicks			
Date	Wing	Weight	Darvic Number	BTO	Nest
17/06/2025		8.9		NW88057	L2725
17/06/2025		8.5		NW88058	
17/06/2025		8.2		NW88059	
17/06/2025		9.0		NW88060	L2625
17/06/2025		7.6		NW88061	
17/06/2025		13.0		NW88062	L1025
17/06/2025		10.3		NW88063	
17/06/2025		8.5		NW88064	L2325
17/06/2025		7.6		NW88065	
17/06/2025		20.5	CL0	NW88024	
17/06/2025		33.0	CL1	NW88020	
17/06/2025		29.3	CL2	NW88019	
17/06/2025		32.4	CL3	NW88021	
17/06/2025		25.1	CL4	NW88018	
17/06/2025		30.0	CL5	NW88004	
17/06/2025		29.0	CL6	NW88015	
19/06/2025		25.8	CL7	NW88017	
19/06/2025		25.4	CL8	NW88027	
19/06/2025		25.9	CL9	NW88052	
19/06/2025		7.2		NW88068	L2125
19/06/2025		6.9		NW88069	
19/06/2025		6.6		NW88070	
19/06/2025		9.0		NW88071	L3125
19/06/2025		7.7		NW88072	
21/06/2025		9.4		NW88073	L3025
21/06/2025		7.0		NW88076	
21/06/2025		7.6		NW88074	L2425
21/06/2025		24.3	CN0	NW88029	

21/06/2025		26.3	CN1	NW88030	
21/06/2025		29.6	CN2	NW88055	
21/06/2025		31.2	CN3	NW88056	
21/06/2025		26.9	CN4	NW88062	
21/06/2025		34.5	CN5	NW88054	
21/06/2025		27.0	CN6	NW88075	
21/06/2025		21.6	CN7	NW88063	
21/06/2025		39.3	CN8	NW88053	
21/06/2025		30.9	CN9	NW88026	
21/06/2025		21.4	CP0	NW88034	
21/06/2025		21.6	CP1	NW88066	
26/06/2025		8.0		NW88077	L3625
26/06/2025		8.1		NW88078	
26/06/2025		7.3		NW88079	L3525
08/07/2025	73	40.5	CS7		
	Avg Growth	2.77grm			
26/06/2025		7.6		NW88080	
08/07/2025		6.9		NW88083	L4125
09/07/2025		7.0		NW88084	
10/07/2025		6.3		NW88085	L4425
		6.4		NW88086	
10/07/2025		10.7		NW88087	L4525

Table 7: Biometrics of Ringed Plover adults

		R P Adults			
Date	Wing	Weight	Darvic Number	Gender	BTO
24/04/2025	135	69.4	CL	♀	NW12981
28/04/2025	138	74.0	PC	♀	NW12901
01/05/2025	137	68.2		♀	NP00323
02/05/2025	137	69.3	JU	♀	NW12913
03/05/2025	140	69.7	JN	♂	NW12941
10/05/2025	131	58.1	E2	♂	NP00333
27/05/2025	137	71.5	PE	♂	NW12902
27/05/2025	136	65.3	P2	♂	NW12982
31/05/2025	135	66.5	E3	♂	NP28885
13/05/2025	134	72.3	E6	♂	NP28891
14/06/2025	135	65.0	E7	♀	NP28892
29/06/2025	135	69.0	E0	♂	NP28897
11/07/2025	130	67.4	JN	♀	NW88327

Table 8: Biometrics and Rings of Ringed Plover chicks

		R P Chicks		
Date	Wing	Weight	BTO	Darvic
27/05/2025		9.9	NP28881	Unk
27/05/2025		9.6	NP28882	Unk
31/05/2025		29.1	NP28884	Unk
01/06/2025		13.4	NP28885	Unk
01/06/2025		15.3	NP28886	Unk
07/06/2025	60	39.4	NP28887	C1
16/06/2025		8.0	NP28850	Unk
16/06/2025		7.8	NP28849	Unk
17/06/2025		8.7	NP28867	Unk
01/07/2024	53	37.2	NP28898	C5
06/07/2024	56	28.0	NP28900	C7

Table 9: Little Tern egg biometrics.

Nest No.	No. of eggs	Length	Width	Weight
L4025	2	32.61mm	23.67mm	8.75grm
		32.37mm	23.50mm	8.70grm
L3425	2	32.43mm	23.12mm	8.94grm
		33.04mm	22.81mm	8.78grm
L3625	2	34.09mm	23.52mm	10.2grm
		33.39mm	24.19mm	9.20grm
L3525	2	35.24mm	23.94mm	11.0grm
		33.49mm	23.35mm	9.50grm
L3925	2	33.31mm	24.08mm	9.60grm
		33.79mm	23.67mm	9.70grm
Average	For 2024	32.66mm	23.53mm	8.89grm
	For 2025	33.38mm	21.33mm	9.44grm

Table 10: Sightings of 1 year old Little Tern.

CR	CR Leg	Last Observed Date	Observed Location	BTO Ring Date	BTO Ring Location	Age Code at BTO Ring	Time Lapse (BTO Ring to Observation)	gender
B9J	L	5/18/2025	Buckroney	6/4/2024	Kilcoole	1	0 years 11 months	
BPT		7/18/2025	Rush	6/4/2024	Kilcoole	1	1 years 1 months	
BN7	L	7/26/2025	Laytown	6/5/2024	Kilcoole	1	1 years 1 months	
BTE	L	7/26/2025	Laytown	6/6/2024	Kilcoole	1	1 years 1 months	
BSE	L	7/26/2025	Laytown	6/8/2024	Kilcoole	1	1 years 1 months	
BSD	L	6/22/2025	Kilcoole	6/9/2024	Kilcoole	1	1 years 0 months	
BN1	R	7/18/2025	Rush	6/10/2024	Portrane	1	1 years 1 months	
CBJ	L	6/22/2025	Kilcoole	6/10/2024	Kilcoole	1	1 years 0 months	
CBN	L	7/16/2025	Baltray	6/10/2024	Kilcoole	1	1 years 1 months	
BZN	L	7/8/2025	Baltray	6/12/2024	Kilcoole	1	1 years 0 months	F
BSC	L	7/26/2025	Laytown	6/16/2024	Kilcoole	1	1 years 1 months	
BXH	L	7/26/2025	Laytown	6/16/2024	Kilcoole	1	1 years 1 months	
C07	R	7/3/2025	Portrane	6/17/2024	Portrane	1	1 years 0 months	F
CDB	L	7/26/2025	Laytown	6/17/2024	Kilcoole	1	1 years 1 months	

C37	L	6/22/2025	Kilcoole	7/10/2024	Portrane	1	0 years 11 months	

Other breeding avian species at Portrane

This year we counted 2 of Skylark (Alauda arvensis), nesting sites. We had in excess of 8 Meadow Pipit (Anthus pratensis), a Cuckoo (Cuculus canorus) and 1 stonechat (Saxicola rubicola). Most of the Meadow pipit had second clutches but a Cuckoo chick was seen in July sitting on the fence in Area D. Both Skylark pairs produced two broods of chicks and fledged a small number of fledgelings. There were only a few sightings of Meadow Pipit and Skylark fledglings this year. This may have been due to the much reduced nesting area. There were three stonechat fledglings sighted in late July 2025.

Review

The breeding season 2025

We now have eight breeding seasons behind us. Our plans for 2026 will include our experiences learnt during 2025. The sum of our knowledge and experiences place us in a good space where we would be reasonably confident in getting fledglings away yet again.
We have now reached a stage in the development of the colony where the number of breeding little tern pairs necessitates the need for paid staff. Paid staff would require some form of accommodation together with toilet facilities.
This year the visitors to the beach were generally respectful of our work. Those who came to see the least tern were highly supportive of our project. There was some minor damage to Area D due to high tides. We lost our original tent to high winds. This was replaced but high winds damaged it beyond repair.
On the 4 th of May eight of our completed Ringed Plover nests were predated. Our first little tern egg was found on May 17 th . The second little tern nest was found the following day. Four ringed
plover chicks from nest RP02 were found on the same day. By May 23rd we had 8 ringed plover chicks. By June 9 th L0425 had hatched and the chicks had left the scrape. The following day we had ringed our 11 th little tern chick. At this time we were unaware that 2025 would be our most
productive year ever.
A total of 103 little tern eggs were laid in 46 nests, the mean clutch size was 2.24 eggs per nest. A further three eggs were dumped on the beach. This year four little tern nests were abandoned. Why this happened in 2025 is unknown but adult predation is likely to have been the reason. Two of the eggs laid in little tern nests were infertile.

Conclusion

Portrane little tern project 2025 presented those who wardened with a very different set of new challenges. The lack of night cover left the site at the mercy of the kestrel and stoat. Our absence cost us dearly and our morale came close breaking point. It is safe to say that without

the wardens to protect the site the beach would be devoid of any breeding species. We can say with some certainty that overall 2025 was less successful than 2024. If we measure our project's outcome based upon fledglings produced we had a disastrous ringed plover year with 3 fledged. We had records set again this year in the number of breeding pairs, the number of eggs laid, number of chicks predated, and number of chicks hatched. We lost and gained some volunteers and again the new added their observations to our learning experience.
With the level of erosion in 2025 we have no idea where nesting might occur in 2026. It is likely to be very different to what it was this year. What is certain is that we have no control over what happens at Portrane in 2026. It will be the winter storms and the birds themselves that will decide whether Portrane 2026 will be a breeding site for little tern, ringed plover, skylark and meadow pipit. The majority of our little tern and all three ringed plover fledglings this year were from the earlier nests.
Finally, my gratitude to the people of BWI Fingal, who asked me to participate in this project. To participate in the protection and preservation of our heritage is indeed a worthwhile privilege. To the public, who despite the inconvenience we caused to their leisure time thanks for your curiosity, acceptance, cooperation and toleration. Without this we would surely have failed. To the agencies, Fingal County Council, National Parks and Wildlife Service and Birdwatch Ireland thank you for your resources, support, and approval. Most importantly to Hans Visser without who's help we would surely have never got started. The volunteers, you came, your efforts protected our charges and once again gave hope for the avian species at Portrane. A motley crew, your commitment, enthusiasm, and resolve made possible a shingle full of wonder. Because of you there are 41 new little tern and 3 ringed plover from Portrane. We look forward to their return and to those who return with them.

Figure 18: Packing up

Bibliography

Blomdahl A. Breife B. Holmström N. (2012) reprint, Flght Identification of European Seabirds, Helm, London

Cabot D. Nisbet I. (2013) Terns, Collins, London.

Ehrlich P. R. Dobkin D. S. Wheye D. Pimm S. L. (1994), The Birdwatcher's Handbook, a guide to the natural history of the birds of Britain and Europe, pp. 219-230, Oxford University Press.

Harrison P. Perrow M. Larrson H. (2021), Seabirds, the new identification guide, Lynx, Barcelona

Kennedy, P. G., Ruttledge R. F., Scroope, C. F., Humphreys G. R. (1954), The Birds of Ireland, an account of the distribution, migrations and habits of birds as observed in Ireland, Oliver and Boyd, Edinburgh and London.

Massey, B. W, Jack M. Fancher, J. M, (1989), Renesting by California Least Terns (Reanidamiento de Sterna antillarum browni en California), *Journal of Field Ornithology*, Vol. 60, No. 3 (Summer, 1989), pp. 350-357

Medeiros R[ab], Ramos J[a], A, Paiva V. H[a], Almeida A[e], Pedro Patrícia[a], Antunes S, (2006), Signage reduces the impact of human disturbance on Little tern nesting success in Portugal.

[a]Institute of Marine Research(IMAR), Departamento de Zoologia, Universidade de Coimbra, 3004-517 Coimbra, Portugal.

[b]A Rocha – Associação Cristã de Estudo e Defesa do Ambiente, apartado 41, 8501-903 Mexilhoeira Grande, Algarve, Portugal.

[e]Centro de Ciências do Mar do Algarve {CCMar), Universidade di Algarve, FCMA, Campus de Gambelas, 8005-139 Faro, Portugal.

McManus, A., (2018), Nesting behaviour and colony dynamics of the Little Tern (Sternula albifrons) at Kilcoole, Co Wicklow, Trinity College, Dublin.

O'Connell, D. P[1'2], Power. A.[1], Keogh N. T.[1], McGuirk J[1], Macey C[1], Newton S. F[1], Egg fostering in Little Terns (Sternula albifrons) in response to nest abandonment following depredation.
.[1]*Birdwatch Ireland Unit 20 Block D Bullford Business Campus, Kilcoole, Co Wicklow.*
[2]Department of Zoology, Trinity College Dublin, College Green. Dublin 2.

O'Connell, D. P.[1'2], Power. A.[1], Doyle S[1], Newton S. F[1], Nest movement by Little Terns (Sternula albifrons) and Ringed Plovers (Charadrius hiaticula) in response to nest to inundation by high

1

tides.
.[1]*Birdwatch Ireland Unit 20 Block D Bullford Business Campus, Kilcoole, Co Wicklow.*
[2]Department of Zoology, Trinity College Dublin, College Green. Dublin 2.
Olsen, K. M. Larsson, H. (1995) Terns of Europe and North America, Helm, A & C Black London

Sibley, C. G., Monroe Jr, B. L., (1990), Distribution and Taxonomy of Birds of the World, Yale University, USA.

Ussher, R. J. Warren, R. (1900), reprint, The Birds of Ireland, an account of the distribution, migrations and habits of birds as observed in Ireland, with all additions to the Irish list. Gurney and Jackson, London.

Baltray reports can be downloaded from https://www.louthnaturetrust.org/publications/

http://www.birds.cornell.edu/clementschecklist/download/