2009 Report for the Little Tern Conservation Project at Baltray, Co. Louth.

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Summary:

- A team from Louth Nature Trust consisting of Sandra McKeever (Coordinator), Margaret Reilly, Peter Phillips and Aine Walsh organised the Little Tern Conservation Project at Baltray in 2009.
- There were 43 breeding pairs this year (in contrast to 21 in 2007 and 35 in 2008).
- 94 chicks fledged from Baltray (in contrast to 41 in 2007 and 29 in 2008)
- The only losses were to Spring Tides in June and July which resulted in minor egg losses.
- All nesting was within the enclosed area.
- The Project is operated by Louth Nature Trust with funding from both the National Parks & Wildlife Service (NPWS) and the Heritage Council.
- €8,000 capital funding for this Project was obtained from NPWS - they also provided quite a lot of wardening, management advice and support throughout the duration of the Project. €10,000 grant was obtained from the Heritage Council and this was mostly used to pay wardens.
- A mixture of voluntary and paid wardening was used throughout the project.

Background.

The Little Tern (Sterna Albifrons) is Ireland's rarest breeding tern species with a population of around 200 pairs (Hannon et al. 1997). They tend to nest in small colonies of 5 to 30 pairs on sand or shingle beaches. The Little Tern's nest is little more than a shallow scrape in the shingle in which they lay their eggs.

Having spent the winter off the west coast of Africa, Little Terns migrate to Europe to breed, arriving in Ireland from late April. A clutch of one to three eggs is laid in late May or June. The incubation period is around 21 days. At about 14 days chicks make their first attempts at flight, but do not fully fledge until about 28 days. Little Terns leave their colony in August, departing Ireland in September.

Conservation.

Threats to Little Terns include human disturbance, loss of suitable habitat and flooding from extreme tides and storms. Predation by foxes, hooded crows, magpies, rats and raptors is another significant threat to fragile breeding colonies. In some instances predation can reduce the breeding productivity to zero.

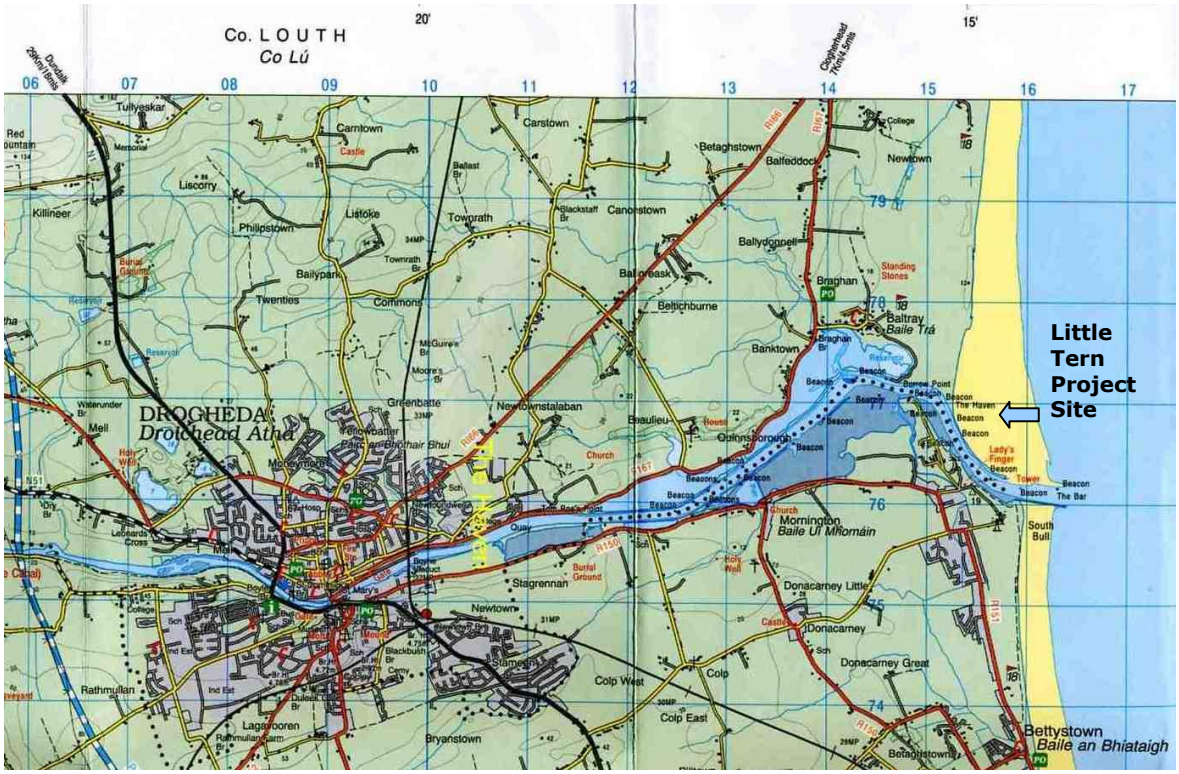
The 1984 and 1995 All-Ireland tern surveys showed that the number of breeding Little Terns had declined from 257 to 174 pairs. Recent estimates put the national breeding population at 250 pairs (Kilcoole Little Tern Report, 2006)

Little Terns are an Annex 1 species under the EU Birds Directive (79/409/EEC), thus EU member states are required to take special conservation measures to ensure that Little Terns remain at a favourable conservation status.

They are also classified by BirdLife International as SPEC 3-: a 'Species with global populations not concentrated in Europe, but which have an unfavourable conservation status in Europe' (Tucker & Heath,1994).
On a national level they are classified as a rare and localised breeder (Coveney et al., 1993) and as vulnerable (Whilde, 1993).

Introduction:
Historically Little Terns at Baltray have undergone a series of extremely poor breeding seasons interspersed with productivity hovering just above zero - see fledged nos. chart below. Principally, breeding productivity of the colony was hampered by a combination of disturbance and predation by a range of nest predators. It is from this point that the project at Baltray began in 2007. This report will discuss the events at the project site and the management strategies employed to maximize the productivity of the Little Tern Colony at Baltray during the 2009 project**.**

Site description.
Little Terns at Baltray breed in an area known as the Haven. The colony is situated within the boundary of the Special Area of Conservation (SAC). As a consequence of winter storms the beach at the Haven changes dramatically year-on-year. A combination of vegetation encroachment and wave dynamics act together to shape the topography of the area. The breeding site is approximately 300m long x 50m wide. The area suitable for nesting was larger than last year. The entire site was observed for a week after the Little Terns began prospecting to see which areas they were favouring. They were using the entire shingle area, and it was decided to enclose most of it starting from close to the Boyne wall and stretching northward, to reduce the probability of breeding failure caused by mammalian predators and to protect them from human disturbance. The specific nest sites chosen did not have a particular pattern, i.e. Little Terns nested in high and low areas.



Ecology of Little Terns at Baltray

The Little Tern's nest is little more than a shallow scrape in the shingle in which they lay their eggs. They have very specific requirements for nesting and this area is suitable because of the presence of a ridge of shingle and its proximity to the River Boyne. They require fresh water fish to feed their young during the first few days of their life; they also require fresh water for drinking and bathing. Their chief prey is small fish - particularly sand eels, which they catch from the sea.

Project management

Site Access:
The local landowner provided us with keys to the gates, through which the breeding area of the shingle beach could be accessed. Since it is quite a distance to this site, the cooperation and support from the landowner was vital from a logistical point of view.

Storage.
As we had no storage facilities at the beach, equipment had to be transported to the site and taken home every day.

Weather and Shelter.

2009 proved to be a better summer than the previous two years, with a good spell of sunshine in June, though July was very wet with unsettled weather with some thunder storms and heavy rain, though temperatures remained quite high. A tent was set up in early June and a portacabin and portaloo were hired on the 16th June. This was essential as we put overnight wardening in place at that time. Both the portaloo and cabin should be in place from the beginning of the project i.e. end of May in future.

Fencing

The first sighting of Little Terns in Baltray was on the 22nd April. To alert the public, notices were erected at all approaches to the beach prior to the commencement of the Project. Following a period of observation (to ascertain the most likely nesting area), fencing was erected on the 9th May. A string cordon was put on the outside the nesting area. 5' wooden posts were used along with blue baler twine. We attached coloured streamers at intervals to make it more visible to the public.

A JCB dug a trench around the shingle area to be enclosed. The area was divided into 5 zones and each zone was enclosed separately. Chicken wire was used on the all but the east side of the enclosure. 5' posts were erected in the trench and 4' x 1" chicken wire was stapled to the posts. The wire was buried approximately 6" in the trench and curved outwards to deter burrowing predatory animals. All new wire was used. Zone 5 which was most northerly, was not fully enclosed. The string cordon surrounded it and netting wire went partway on the inside. Little Terns did not nest there so it was left partly enclosed. It was very useful as it acted as a buffer zone so that people and dogs were well away from the nesting terns when they approached from the north side of the beach and this saved us having to go up there many times daily to ask people to keep a distance from the nesting birds.

Each of the other 4 enclosure zones was fenced with electric fencing, using 4 rows of 6 strand wire on the north, south and west sides and using 6 rows on the east side as the electric fencing was the sole protection on this side. Plastic electric fence posts were used and these were easily inserted into the sand immediately outside the chicken wire. The plastic posts were attached to wooden posts at intervals to strengthen them. Each of the 4 zones had a separate electric fencer and this was securely placed in a waterproof bag and buried beneath the sand. Over-ground switches were discretely wired from the fencer to wooden posts and these were used for turning them on and off. As we could not get an earth on the beach, we set up every second row of wire as an earth and every other row as live, we also used the chicken wire as an earth. This meant that an electric shock would be administered when earth and live were touched at the same time. The electric fence was on at all times and checked at least once every day.

A leg was put on the most northerly point of the fence pointing towards the sea when hatching began. This consisted of wooden posts and string, with signs asking walkers to keep as far as possible out from the enclosure as chicks had moved out on the seaside of it.

To prevent avian predators using the wooden posts as perches, we attached inverted cut plastic bottles on top of each post. Consequently if a bird attempted to land, the bottles would not support their weight - this worked very well as a deterrent.

All nesting took place within the enclosed area.

Signage.
Signs were prepared, and to cater for non-English speaking people, some were designed using symbols and pictures. These were erected at all entrances to the area, on the northern end of the beach and all around the nesting enclosure. As the signs made by ourselves did not wear well, we had signs professionally printed and these should have a much longer life.

Two large 1m x 1m full colour interpretative signs were erected, one at the end of Baltray village at the approach to the Haven and the second further on at the main parking area beside the locked gate.

Signs were put at the locked gate and at the entrance to the Haven giving a Little Tern update on nest, egg and chick numbers.

Losses.
Losses this year were thankfully very small.

- 2 nests with 4 eggs were washed away by spring tides early on 26th June and the last 3 nests with 6 eggs were washed away by the spring tides on 23rd July.
- There were 3 eggs in 2 nests that were abandoned and 7 eggs in 5 nests that were infertile.

The low level of losses can be attributed in large part to the 24 hour wardening. As the first clutch of eggs was intact, hatching happened early and many nests that most likely would have been washed away by the spring tide in late June were already hatched and the chicks had moved away from the nest.

After the spring tide, the area was checked and the only bodies found were one ringed plover chick and a gannet which was probably washed in.

Threats and Potential Predators.

Predator Control.
Predator control continued this year with the help of experienced hunters. This started in early May and this made a big difference to the number of Hooded Crows in the area. Despite the presence of larsen traps crows continued to patrol the area. When a volunteer was present on site Hooded Crows kept away. Combining both management strategies ensured that there was no predation by Hooded Crows

during the 2009 Project. A crow was released from the larsen trap on two occasions so we purchased padlocks to secure it.

***Spring Tides**:* - The spring tides are always a threat to the Little Tern colony. Electric fencing was the only fencing on the eastern side of the enclosure and while it was damaged in each spring tide, it was quite easily re-erected. This was a great improvement on 2007 when the chicken wire fencing was partly buried by the tides, and was very slow and difficult to repair.
Nightime or early morning spring tides are always the highest. During the week of the new moon in June (Mon 22nd), the highest spring tide for Tom Roes Point was the early hours of Thursday and Friday at 6.9m. The high tide on Friday morning at 2:27 came well into the enclosure and washed away two nests. The weather was not stormy so we were surprised at the extent to which the tide encroached into the enclosure. The July spring tides were higher and came well into the enclosure at all points. Three nests remained unhatched and these were washed away. Fortunately all other nests had hatched which meant that chicks could move away from the tide and we saw no signs of tern fatalities.

One nest (no. 35) was moved on Friday 26th June as it was very close to the high tide mark, this was successful and the eggs hatched as normal.

***Hooded Crows**:* These Corvids are extremely adept predators and following on from the 2007 Project when they predated 24 eggs in a single day, wardens were asked to be particularly vigilant in watching out for them.

Otters: - No otters were seen this year.

***Dogs**:* - Almost all dogs were with their owners and we approached the owners in a friendly manner. We explained about the Project and asked that the dogs be kept on leads when in the general area and to avoid the enclosed area of the beach altogether.

There was a huge amount of co-operation on this and most dog owners used a different route for the entire Project. The volunteer presence was vital as we needed to approach dog owners on a daily basis as they either emerged on to the beach at the Project entrance, or walked up the beach from the Termonfeckin area.

We noticed that when the volunteer warden was seen monitoring all movements in the area, most walkers with and without dogs then tended to veer away from the nesting area.

There were a small number of people who came out with their dogs not on leads and not properly under control. Two people who regularly walked their six dogs around 5:30 am normally walked an alternative route but on two occasions their dogs emerged loose around the project site and disturbed the birds.

***Foxes**:* - As the Kilcoole Little Tern Project had experienced problems with foxes, we were very watchful for any traces of this predator, conscious that an entire colony of

chicks could be wiped out in one night. The separate zones were set up so that if a fox or other predator gained access to the enclosure, it would be restricted to a small area only.

A fox was seen patrolling the area one morning at approx. 5 to 6 am and fox tracks were seen regularly in the dunes and on the beach close to the enclosure. On two occasions, the sand was disturbed beside the fence and it was thought that a fox may have started to dig down but got a shock from the electric fence and desisted.

Stoats*:* - There was a family of stoats on the golf course at Baltray and stoats were seen around the enclosure during the day. On one occasion, four stoats were seen and they ran into the enclosure through the 1" netting wire.

Raptors*:* - Kestrels were seen in the area but the human presence most likely kept them at bay. While they flew over the enclosure, they seemed to hunt in the dunes. A Sparrowhawk frequented the area but didn't appear to attempt to predate the Little Terns. A Peregrine was seen from time to time. The Little Terns mobbed it and it continued on it's way in a southerly direction.

Rooks*:-* It appeared that as the Hooded Crows kept their distance due to the presence of wardens, that Rooks were more prevalent on the beach. They were chased off by the volunteers if they came close to the enclosure, and we had no real problems with them.

Other Predators*:-* No other predators were seen.

Walkers*:* - We also had a huge amount of co-operation from walkers, many of whom changed their normal routes to completely avoid the area. Again the volunteer presence was essential and much time was spent in directing walkers away from the area. In spite of all the signage, some people approached the enclosure. It would be fair to say that over 95% of people co-operated when approached by the volunteers**.** Quite a few walkers walked up along the string cordon on the beach side, probably to avoid the soft sand and this disturbed the nesting birds. The string cordon is out slightly beyond the high tide point and would be washed away if it was any further out, but it would be useful to find a way to encourage walkers to keep further out. Half way through the project, 'legs' were added to the string cordon going out towards the sea and signage asking people to walk far out due to chicks coming out on to the beach.

Wardening.

The first eggs were seen on the 27th of May and wardening was in operation from the 30th May from approx 6 am to 10:30 pm. On Tuesday 2nd June, part-time paid wardening commenced with wardens being paid to do the 4 am to 9 am and the 6 pm to 11 pm shifts. The remainder of the day was covered by volunteer wardens as we did not have sufficient funds to pay for full time wardening.

The wardening hours were extended on 16th June to cover 24 hours which meant that wardens were paid to work overnight. This decision was taken as we had by this time over 90 eggs and the risk of predation was very high with almost no hours of darkness. In 2007 and 2008 large predations occurred either during the night or

early morning before wardening commenced for the day. A cabin and portaloo were rented which were **essential** with the long hours of wardening.

The volunteer wardens were **essential** for the 9 am to 6 pm shifts and some were happy to do some later shifts which helped to eke out our funds over a longer period of time. The passion, dedication and commitment of these volunteers cannot be overstated. These people gave up their time, day in day out, week in week out, without complaint in every type of weather, their presence and co-operation was vital to the success of this Project. The NPWS through their rangers gave much needed wardening time to the project. While our database of volunteers expands year on year, many are not available for one reason or another and the number of available volunteers has reduced making it difficult to get cover for every day. The NPWS rangers made a huge difference to this as their shift covered a large portion of the day.

Hooded crows watched the area from a distance and were extremely opportunistic, we learned that they could judge our distance from the enclosure and they would approach at the slightest opportunity. It was clear to us that a presence was needed on the beach in close proximity to the enclosure so that immediate action could be taken at any moment, i.e. that the volunteers were within striking distance of any predator that appeared. Because of the length of the enclosure, it was difficult for one volunteer to adequately warden the area.

Volunteers liaised with the public, gave updates on the Project, kept walkers and their dogs away and watched out for and chased off predators such as Hooded Crows and Rooks. Volunteers were not involved in monitoring the nesting, they stayed outside the cordon, only entering to chase predators and never entered the enclosure.

The part time paid wardens were: Maurice Conaghy, Barry O'Malley and Donald McGann.

Monitoring.

It was important to ascertain the losses as well as the successes. Knowing how many eggs were laid, how many were hatched, how many were lost and the reasons for those losses, was essential. The nests were therefore checked daily during the time that eggs were being laid. Each newly discovered nest was marked by placing a numbered stone approximately 1 metre in front of it and a piece of debris from the beach close to it. When hatching started, the nests were again checked daily until hatching was complete but disturbance was kept to a minimum. We observed nests daily to ensure that all nests were still being tended. Monitoring the numbers of chicks was much more difficult as they moved around on the beach and were hidden much of the time, and were therefore very difficult to locate.

Numbers.

Numbers of Little Terns present at Baltray went from approx. 40 at the beginning of the project to approx. 100 in June.

Nesting.
The first nest was discovered on 27th May with 2 eggs at which point incubation had begun. There were 10 nests at the end of May, 24 nests by the 5th June and 43 nests by the 17th June. Nest 44 was marked on the 21st June and the last nest (number 50) was marked on the 9th July.

17 nests had 3 eggs, 25 nests had 2 eggs and 3 nests had 1 egg. There were 2 nests with 2 eggs that only hatched 1 egg, the other eggs likely to have been infertile. 2 nests with 2 eggs did not hatch, one was abandoned and the other was likely infertile. One of these, nest 25 continued to incubate for over a week after the eggs were due to hatch and then moved a very short distance away and appeared to be trying to incubate a small stone. On the 3rd July, the abandoned 2 eggs were gone from the nest.

The first 4 chicks in 2 nests were hatched on 15th June. On the 23rd June there were 17 chicks and that figure increased overnight to 42. At the end of June there were 74 chicks and 21 eggs.

One nest was moved as it was very close to the high water mark during the spring tides, this was successful and the eggs hatched.


Adult Little Tern


Little Tern chick and 2 eggs


2 juvenile Little Terns with adult


Spring Tides entering the enclosure

3 chicks – very difficult to see

Juvenile Little Terns

Notes & Observations*:*
A much larger area was enclosed at the beginning of the project this year. This was a better strategy as we had to add two more sections last year which disturbed the nesting birds. Although the most northerly section was not completed due in part to lack of time and the fact that there was no nesting in that area, it would have been more beneficial to at least enclose this last section with electric fencing as it was much used by the Little Tern chicks after hatching. During the nesting period, this section acted as a valuable buffer zone so that even though beach users may have been close to that section, they were still a good distance from the nesting birds. This reduced the amount of time spent by the wardens asking people to keep a distance from the nests.

Change in Little Tern Behaviour when hatching commenced.
The Little Terns became much more aggressive when their chicks had hatched and were less tolerant. It became necessary to keep a greater distance from the enclosure. Because of changes in the type of fencing used on the eastern side of the enclosure, repairs could be carried out relatively quickly, thereby causing much less disturbance to the birds than last year. The Little Tern adults were more aggressive than seen before and they bombed the wardens on a number of occasions even though they were well outside the enclosure, they also swooped down on people even though they might be a good distance from the enclosure. It became necessary to warn wardens to wear head protection and hats were worn when going in to check nests.

Aggressive Little Tern

Aggressive Little Tern

Importance of Preserving the First Nests and Eggs

It has been a priority to bring the first clutch of eggs to a successful fledging. 2007 and 2008 saw large predations of eggs while in 2009, by and large, the first clutch of eggs was successfully hatched. This is important for a number of reasons:

- The egg numbers tend to be higher in the first clutch i.e. 2 to 3 eggs, whereas there are generally less eggs laid in subsequent attempts i.e. 1 to 2.
- If chicks fledge from the first laid clutch, they have longer to develop thereby giving them a much stronger chance of successful migration.
- Early hatching means that less eggs tend to be lost to spring tides.

Chick Movements & Protection.

The Little Tern chicks leave the nest after the second day and tend to move towards the eastern side of the enclosure and after about a week are likely to be found outside the enclosure on the eastern and northern side, often moving inside the enclosure at night time or during full tides. While this seems to leave them vulnerable, there have been no losses from this behaviour and as it is clearly a strong instinct in both chicks and parents to move towards the sea, no preventative action will be taken to stop them.

Fencing Issues.

At the end of the 2008 Project all netting wire went to the landfill as we found that it is not suitable for re-using. All new wire was used in 2009 and had become very rusted by the end of the project. We need to source a different type of wire that will do the same job but that may be reused. All new electric fencing wire was used as it is important that we minimise problems with it so that we avoid unnecessary disturbance to the birds.

The decision to use only electric fencing on the eastern side worked out well. We found that:

- Damage by spring tides was much less and was more easily and quickly repaired, thereby causing much less disturbance to the nesting birds.
- The taking down of the fence was much less work as there was no chicken wire to dig out of the sand.
- We had no losses to ground predators though a stray dog was observed running along the fence on the east and it nimbly jumped over the electric fencing and ran up the enclosure before jumping out again. As it jumped over rather than through the electric fencing it would not have received a shock from the wires.
- A leveret was seen in the enclosure and their prints were seen inside the southern end of the enclosure. They gained entry on the eastern side where they could easily run under the wire. While this did not cause us any problems, we are conscious that the eastern side may be vulnerable to small mammals.
- The Little Terns walk under the electric fencing, which does them no harm as they would need to touch 2 strands in order to get a shock, we need to consider this when trying to make the fencing as secure as possible.

People tend to walk close to the string cordon and we will need to extend 'legs' on each end going out towards the sea along with signage so that walkers are encouraged to keep further away from the nesting enclosure. A lot of time was spent asking people, often with dogs to move away from the area.

Expenditure.
The NPWS made €8,000 available for the 2009 Project which was greatly appreciated. This covered fencing, signage costs, leaflets, hire of a portaloo and cabin, also powerful torches and printed vests for the wardens. The Heritage Council gave a grant of €10,000 which was used mostly for wardening wages, this was an invaluable boost to the project.
As with last year, having accounts set up in the name of the NPWS proved slow and difficult.

Human Resources.
The volunteers were exceptionally generous with giving their time to the Project, but the drain on their time was huge. A number of the 2007 and 2008 volunteers were not available for the 2009 Project and we found that we could not cover all the necessary hours with the volunteers available. Dr. Maurice Eakin of the NPWS made himself and the local Rangers available and the hours that they gave to the project were invaluable.

With the grant from the Heritage Council, three part time wardens were employed to cover the early morning and late night hours. However, when the number of eggs reached high figures, a decision was made to extend wardening to cover the full 24 hours each day. In the previous two years, we found that the most vulnerable time was when the eggs were being incubated and that was when the large predations occurred in 2007 and 2008. The paid wardens covered the hours between 6pm and 9am and volunteer wardens continued to cover the remainder of the day. While this meant that we would not have sufficient funds to continue the paid wardening for the full duration of the project, we felt that the 24 hour wardening was the best strategy.

As the NPWS paid for the hire of a cabin and portaloo, this made the wardening more comfortable for both the volunteers and paid wardens.

Storage.
Secure storage at the project site would be beneficial. Work was ongoing day in day out and all materials were transported there each day and taken home again. Our cars were permanently filled with paling posts, hammers, crow bar, sledge hammers, nails, screws, shovels, spades, plastic bottles, fence tester, staples, pliers, etc, etc, etc. A container would be very useful for this purpose.

Louth Nature Trust.

Louth Nature Trust was incorporated in February 2008. It is a Company Limited by Guarantee and not having a Share Capital. It has Charity Status with the Revenue Commissioners. The Little Tern Conservation Project is run through Louth Nature Trust and was the main reason for its foundation.

Information and Publicity.

In addition to the signage around the area of the Project,

- With the setting up of Louth Nature Trust (LNT), a web site (www.louthnaturetrust.org) was designed and a Blog set up to inform people of the progress of the Little Tern Conservation Project. This is popular with web site visits peaking at 3,775 for the month of July, showing a strong interest in the Project by the public. This proved an effective means of communication with the wider public.
- The local newspapers (Drogheda Independent and The Drogheda Leader) and the local radio station LMFM gave coverage to the Project on a number of different occasions throughout the Summer.
- Peter Phillips of Louth Nature Trust gave a talk and ran a Little Tern art competition in three local national schools. This was sponsored by Coca-Cola and generated much interest in the project. The posters were displayed on our web site.
- The Minister for the Environment, Heritage and Local Government, Mr. John Gormley T.D. visited the site on the 17th July to see firsthand the progress that has been made in bringing the numbers of Little Tern chicks from a zero situation in the 10 years preceding the project to a total of 164 chicks in the last three years.

Minister Gormley viewing the Little Terns with Sandra & Margaret

Acknowledgements.

Funding from the NPWS was greatly appreciated. Thanks are due to Padraig Comerford, Maurice Eakin and the NPWS Rangers.

Funding from the Heritage Council was greatly appreciated and allowed us to have some paid wardens for the first time. This played a large part in the success of the project this year.

Thanks to the Hartigan family for giving us access to the beach through their land - Anne Hartigan who owns the land and her son Dominic who liased with us. We were facilitated in every way possible and they couldn't have been more helpful. Dominic also kindly allowed us to store the fencing materials in his shed.

A huge thanks is due to all the volunteers who gave their time over the three months and to those who helped erect and dismantle the fencing :
Kieran Campbell, Maurice Conaghy, Tommy Reilly, Andrew Kelly, Larry Lenehan, Willie Connell, Paddy Burke, Stuart, Michael and Matthew Turnbull, Nikita Coulter and Eoghan, Eric O'Neill, Brendan Shiels, Eamonn Hanratty, Laura & Sylvan, Niall Harmey, Sylvia O'Hehir, Maurice Eakin, John Brophy, Annette Lynch, Ollie Dyas, Billy Clarke, Susan McKeever, Patricia Fuentes, Cathal Johnson, Len Johnson, Paddy Carolan, Rickey Gerard, Mary Smith, Maria Goodwin, Anto Kerins, Barry O'Malley, Joan Conaghy, Breffni Martin, Geoff, Gerry, also Malta Services plus the Organising Team who are listed on page 1.

A special mention for:
Maurice Conaghy who looked after the predator control and whose help and expertise were vital to the success of the Project.
Tommy Reilly who managed all fencing issues and carried out repairs to the fences.
Malta Services, Drogheda, a day service for adults with intellectual disabilities. They provided a team of supervised volunteers twice a week.

Little Tern Summary 2009 Project

	Breeding Adult Pairs	**Nests**	**Eggs**	**Chicks**
Total	43	50	114	94
Abandoned		2	3	
Infertile		5	7	
Lost to Tide		5	10	
Hatched				94
Fledged				94