

# CBO NEWS

*Copeland Bird Observatory Newsletter (Winter 2013)*



## Diary Dates

### Winter Talks (Ulster Museum)

Tuesday 21<sup>st</sup> January at 7:30pm

#### **What a load of Rubbish!**

by Ian Humphreys

&

#### **Shag Ringing Trip to the Maidens**

Short film by Sandy McWilliams

&

#### **Birds & Animals of Kenya**

*lots of birds & animals with a few butterflies & flowers*

by Peter Munro

The Copeland Bird Observatory (CBO) was formed in 1954 and is Northern Ireland's only bird observatory. The CBO is situated off the County Down coast, at the southern side of the mouth of the Belfast Lough. It is operated on a part-time basis by volunteers and is open from late March to the end of October.

#### **CBO Website:**

[www.copelandbirdobservatory.org.uk](http://www.copelandbirdobservatory.org.uk)

#### **Facebook:**

[www.facebook.com/copelandbirdobservatory](http://www.facebook.com/copelandbirdobservatory)



## Newsletter Articles

Please forward your stories and photographs for future issues to Niall Waterman.

Email: [niallwaterman@hotmail.com](mailto:niallwaterman@hotmail.com)

## Breeding Terns at Copeland Bird Observatory, part of the Copeland SPA, in 2013

After the late season success of 2012 we waited with bated breath to see if the Arctic Terns would come back to the outer two islands in 2013. Sure enough the first birds arrived in early May and it soon became apparent that the entire population had decided that the outer islands were the place to be. As is typical with Arctic Terns older birds lay first [2] and approximately 500 pairs laid eggs in early June. In mid June these were joined by more birds so that by the end of the month there were close to



**Tern Colony on CBO**

1000 pairs associated with the colony. The method of estimating populations is to take a count of all birds at the colony and use a modification factor ([1], [3], [4]) to generate the number of pairs. Many of these later young birds only stay briefly and make a hurried breeding attempt. On Mew Island a peak of 275 pairs were present in early July, making for an overall estimate of 1250 pairs, a record for the islands. In June 4-5 pairs of Common Terns were present on Old Lighthouse Island but this increased to 25 pairs by mid July. The early nesters raised at least 6 young, the first successful breeding on Old Lighthouse Island for many years.

In 2012 it is thought that at least 200 fledged [6]. Although a couple of chicks may have flown in 2011 [5], this is the first confirmed fledging of youngsters since 2006 [4]. In 2013 the best estimate of the author is that 700 chicks fledged. Several hundred were ringed in early July across the two islands but by the end of July hundreds of young birds were present around the



**Arctic Tern Chick**

islands, with the evening roost on Gavney holding 300 young each night, only half of which were ringed. However only half of the breeding adult birds remained at this time, many having presumably left with their fledged young. Approximately 150 chicks were still on the beach and these fledged in early August. Mew Island still had 100 adults present in late July, although the island was not visited then. Therefore an estimate of 700 fledged young seems a conservative best guess and it was without doubt the best year for breeding success in living memory.

### Why have the birds been successful?

1. Sound lures – there is little doubt that the sound lures attracted the birds to the outer islands in 2012 and again helped in 2013. It is the author's opinion that this was the fundamental reason for the breeding success in 2012.
2. Vegetation cover – there is relatively little vegetation cover on many parts of the Copelands where terns nest. The southern shore of Old Lighthouse Island has extensive Sea campion *Silene uniflora* with some Red campion *Silene dioica* and Bracken *Pteridium aquilinum*. This protects the chicks from heavy rain which is a huge killer of young birds.
3. Lack of disturbance – Big Copeland has open public access. In contrast landing at Old Lighthouse Island is controlled by Copeland Bird Observatory and unauthorised visitors are relatively rare. Mew has more regular visitors than Old Lighthouse Island but again in relatively low numbers compared to Big Copeland.
4. Gulls and other predators – the location chosen by the terns has the lowest density of breeding large gulls on Old Lighthouse and Mew islands, although Herring Gull predation was still observed in 2013. Gull predation on Big Copeland and Mew in the past ten years has been significant.
5. Bird density – the number of birds breeding in one spot was very high, and this high density meant it was very difficult for predators (particularly gulls) to enter the colony.

Coulson and Horobin [2] showed that three year old birds had a success rate of just 0.24 chicks per pair raised, rising to 0.58 per pair for birds over 6 years old. Many of the terns currently attempting to breed on Copeland must originate from the last good breeding years of 2005 and 2006 and be 7-8 years old, with other Copeland raised birds being even older. These birds are therefore at optimum breeding age with enough experience to breed successfully. With a little bit of help and some good weather we look forward to another good year in 2014.

**Kerry Leonard**

### References

[1]	<b>Bullock I.D. &amp; Gomersall C.H. 1981.</b> <i>The breeding populations of terns in Orkney and Shetland in 1980.</i> <i>Bird Study</i> 28, 187-200.
[2]	<b>Coulson J.C. &amp; Horobin J. 1976.</b> <i>The influence of age on the breeding biology and survival of the Arctic tern <i>Sterna paradisaea</i>.</i> <i>J. Zool. Lond.</i> 178, 247-260.
[3]	<b>Leonard K. 2005.</b> <i>Breeding terns on the Copeland Islands ASSI in 2005.</i> <i>Unpublished report to the Northern Ireland Environment Agency.</i>
[4]	<b>Leonard K. 2006.</b> <i>Breeding terns on the Copeland Islands ASSI in 2006.</i> <i>Unpublished report to the Northern Ireland Environment Agency.</i>
[5]	<b>Leonard K. &amp; Wolsey S. 2011.</b> <i>Tern populations on the Copeland SPA in 2011.</i> <i>Unpublished report to the Northern Ireland Environment Agency.</i>
[6]	<b>Leonard K. &amp; Wolsey S. 2012.</b> <i>Tern populations on the Copeland SPA in 2012.</i> <i>Unpublished report to the Northern Ireland Environment Agency.</i>

**CBO is supported by the following:**

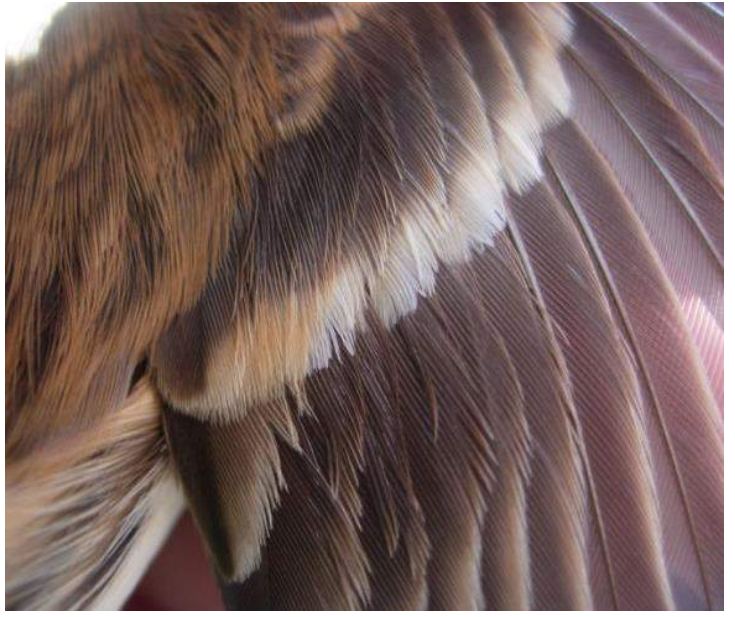




Test Your Identification Skills (Answers on Page 10)



(a)



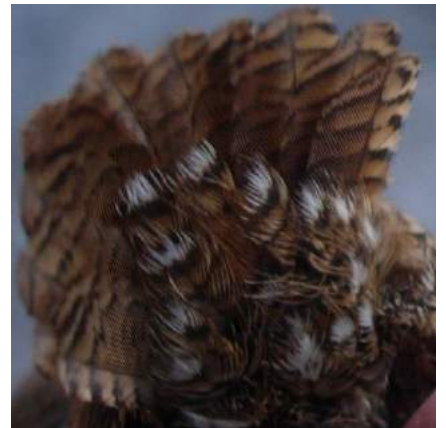
(b)



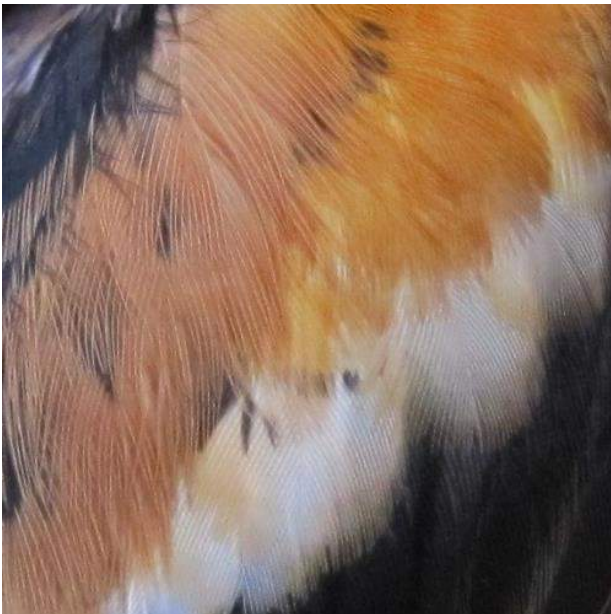
(c)



(d)



(e)



(f)



(g)



## **Visit by Cambridgeshire Birders' (29 July – 5 August)**

Three of us from Cambridgeshire – Doug (RSPB reserve manager/C permit holder), George (birder/salad maker), and Louise (Cambs Bird Recorder/chief cook) – had an excellent week at the observatory. Mist nets were opened on five mornings; a Potter trap was set by the garden pond; and Kerry led a couple of sorties into the tern colony and found us a late Black Guillemot brood. We caught 78 birds (72 new) of 15 species; highlights were 25 Arctic and 1 Common Tern pulli, 2 Black Guillemot chicks, 18 Willow Warblers, and a juvenile Water Rail (in the Potter trap baited with pork scratchings).

The weather was pretty good, so when we weren't ringing, cooking, or mending mist nets, we were out and about, and there were always birds to look at. As expected, the sea was productive, and there were flocks of Puffins and Black Guillemots close to shore, Manxies rafting a bit further out, and Gannets, Auks, Gulls, etc passing. Two Balearic Shearwaters were seen but no Skuas apart from an Arctic from the boat coming out. At the southern end of the island, hundreds of Terns created a constant background noise and Gavney was always worth scanning. The vast majority of the flock were Arctic Terns, but there were also dozens of Common Terns and Kittiwakes, plus an adult Roseate Tern, an adult Med Gull, and a juvenile Forster's Tern. At night we joined the sorties into the Manxie nesting areas where Kerry was fitting GPS trackers to some of the adults, and Louise had the pleasure of ringing lots of them.



**George testing a post, which doesn't fall over!**

We also tried to make ourselves useful by doing various odd jobs around the place, particularly maintaining the net rides. Garden was our least productive net, with over-tall bushes on one side and very little cover on the other, so towards the end of our stay we cut some of the bushes back to the height they had previously been, and put in some fence posts in readiness for wire netting to exclude rabbits from the new shoots on some willow stumps. We hope someone can follow up with the netting!

Finally, a grateful 'thank you' to Kerry and his field assistants (Catherine and Helen) for their part in making our stay a trip to remember. If you've never been, we recommend it, and we all hope to return some time soon.

**Doug Radford**

## **Loo with a View**

Last month, the CBO cliff-side loo was featured on the BBC News webpage as part of World Toilet Day (19 November). World Toilet Day aims to break the taboo around toilets and draw attention to the global sanitation challenge faced by a staggering 2.5 billion people. World Toilet Day brings together different groups, such as media, the private sector, development organisations and civil society in a global movement to advocate for safe toilets.

David Galbraith (CBO) provided the local knowledge for the article and tactfully stated in the piece: "*How many people can enjoy this panoramic vista when they spend a penny?*". The full article by Fiona Murray (BBC News NI) can be found at: <http://www.bbc.co.uk/news/uk-northern-ireland-24928565>.



**View from the CBO cliff-side loo**

## **A weekend at the Copeland Bird Observatory**

I visited the Copeland Birds Observatory, for the first time, the weekend of 18-20 August of the present year. The weather had been sunny for almost all the time and the sights from the top of the Lighthouse Island were breathtaking. But, the thing that surprised me most was the composition of the ground: it was like walking on a felted carpet, due to the widespread fescue. But, where the soil was rocky, the beautiful flowers of the Sea Campion and Red Campion could be spotted. The island had been the location of the Copeland lighthouse (now on Mew Island) and the families of the lighthouse keepers lived there, in a big, beautiful stone house, that currently hosts the volunteers and the visitors of the CBO.

The first inhabitant of the island probably introduced rabbits as an additional source of food and cut the original vegetation of bushes and ferns to have more land to cultivate. The population of rabbits spread and they further modified the landscape, digging burrows and favouring the growth of the fescue and, as a consequence, made the ground more compact and suitable for the digging of more tunnels. The result is that, at the present, the island hosts a big rabbit population and that had an unthinkable consequence on the local wildlife: the presence of so many burrows has led to the establishment of one of the most accessible Manx Shearwater colonies in the British Isles! These birds spend all of their life at sea and only come inshore to breed. They nest in holes in the ground that require a lot of effort to dig. But what if somebody else has already excavated hundreds of comfortable burrows? The Shearwater, equipped with a strong beak, has just to evict the rabbit from its home and take its place. The present population of Manx Shearwater is estimated to be around 3500 pairs. So the modified landscape and the enhanced environmental conditions on the CBO have helped with the conservation of this important seabird.

During my stay at the CBO I've also had the opportunity to see, for the first time, a Storm Petrel. These birds are from the same order of seabirds as the Shearwater, *Procellariiformes*, and are perfectly adapted to the life offshore. We caught some of them in a mist net on the Friday night, and they were ringed and measured before being released. They are amazing little birds and have a pleasant oily smell, due to the glandular secretion that they spread on their feather to keep them waterproof. In fact, they spend almost their entire lives at sea, coming inshore only to breed or if stranded by a storm.

It has been really touching see these little birds, completely awkward on the ground, flying towards the dark sea after being released.



**Cristina on the Observatory**

But the life in the Lighthouse island is not only about ringing birds: I've had plenty of time to relax and enjoy the gorgeous scenery, walking around and observing the grey seals sunbathing on the shores of Mew Island. I've learnt much from my visit at the CBO, especially about the conservation of seabirds and the management of landscapes. I would really like to thank the passionate people who volunteer and look after this wonderful place!

### ***Cristina Blandino***

*Cristina is from Sicily and has been working in N. Ireland for the past 9 months as a European Voluntary Service (EVS) volunteer with Ulster Wildlife.*

## **Updating Contact Details**

Please contact the Membership Secretary if your contact details change (e.g. new email address).

Ron Bishop (Membership Secretary) – **Tel:** 028 9336 4040, **Email:** [rh.bishop1@gmail.com](mailto:rh.bishop1@gmail.com)



## **Summary of Mowing Operations on CBO (2013)**

215 hours of mowing was completed during 2013. The usual annual lawn mowing programme was carried out four times from May through to October, continuing the same treatments that have been carried out on some areas since 1996. All cuttings were collected.



**Philippa Revill and Helen Humphreys mowing in October 2013**

The benefits have included providing access around the island for both visitors and birds. The cumulative effect of many years of work has been to reduce the health, vigour and presence of rank vegetation such as red campion and bracken, replacing it with firstly neutral grassland and finally restoring a valuable fescue grass dominated maritime cliff and slope habitat. This habitat is especially important for supporting the rabbit population, which has been consistently high in recent years. This habitat also provides an important function or service: the deep roots of the fescue grass bind the soil together much better than rank vegetation species. This provides better soil stability where it is needed most, on paths and throughout the shearwater colonies.

CBO is looking for volunteers to help with not just with the mowing, but surveying and recording the vegetation to monitor progress. The next newsletter will have more details about how to get involved in this important conservation work during 2014.

***Ian McKee***

### **Visiting the Copeland Bird Observatory (CBO)**

Trips to the CBO should be booked in advance through the Bookings Secretary.

David Galbraith (Bookings Secretary) – **Tel:** 028 9338 2539, **Mob:** 07885 834398

**Email:** [davidgalbraith903@btinternet.com](mailto:davidgalbraith903@btinternet.com)

## Work Party Trip

On 23<sup>rd</sup> November, a work party went out to the island. The work party consisted of eleven volunteers, namely: Margaret Adamson, Brenda Campbell, Peter Courtney, Adam Cubitt, Norman Cubitt, Pat Flowerday, David Galbraith, Helen Humphreys, Ian Humphreys, Wesley Smyth and Niall Waterman. The purpose of the trip was twofold:

- To fit a metal corrugated roof over the existing leaking felt roof on the ringing laboratory
- To conduct a shoreline clean-up.



**The boat being loaded at Donaghadee Harbour**



**Pat and Helen unloading a metal roof panel at CBO**

The first part of the trip involved the hard physical work of loading and unloading the boat and bringing the materials up to the accommodation. Metal roof panels, bags of coal, gas cylinders, two lawn mowers and tools all had to be carried or wheeled up.



**Group bonding session in the kitchen**

*"Before starting work, we had fun guessing what piece of litter would be the most numerous. Seven members clad with work gloves and collecting bags set off to scan the western shoreline. It wasn't long before Wesley's choice was found, a Lucozade bottle followed by my guess of a coke bottle. However, the person who won was Peter as he had guessed water bottles. Cotton buds and burst balloons were the most numerous things found although these 2 things had not been guessed by anyone. The oddest thing lifted was a workman's mast by Brenda and a plastic clothes peg by myself. There were also 7 good tennis balls which Adam took home for his Granny's dog to play with".*

**Margaret Adamson**

After the hard labour the group broke for lunch. This gave everyone the chance to relax and get to know each other.

After lunch, the work party split into two groups. One group of four volunteers formed the roofing team and the other group of seven formed the litter lifting team. Margaret introduced a competitive spirit into the group by asking people to guess what would be the most common piece of litter found during the litter lift.



**Litter lifters hard at work**





**Litter lifting team display the results of their labour**



**Wesley and Norman handing metal roof panels up to David on the ringing laboratory roof**



**David securing metal roof panels to the ringing laboratory**

Over the years, the old felt roof on the ringing laboratory has developed leaks. It was decided the best way to fix the roof would be to fit a number of prefabricated, overlapping metal corrugated roof panels on top of the existing felt roof. The photograph on the left shows David screwing the panels down on the laboratory roof. Finishing edge strips and front metal rainwater guttering will be fitted to the roof at a later date.

Hopefully, this new metal roof will extend the life of the ringing laboratory for another few years.

*Niall Waterman*



## **Summary of Ringing at the Observatory in 2013**

During 2013, manning was affected not only by the vagaries of the weather and the continuing manpower shortage but also but also by increasing difficulties relating to the boat service. Nevertheless, 2 rarities and several infrequently ringed species were caught. There were some good Spring days – in April particularly – but Autumn migration (and therefore ringing) was quite disappointing, or late and thus missed, unlike previous years.

### **SPRING**

The ringing season opened on the weekend of 6/7 April, when a fair catch of a range of species included 3 Twite, 6 Goldcrests, 5 Robins and the only 2 Spring Meadow Pipits. The following weekend had moderate catches with significant arrivals of more Goldcrests (33 ringed on 13th and 7 on 14th) and Robins (10 on 13th) along with small numbers of Willow Warblers, Chiffchaffs, the year's first Blackcap (in the new South Heli Trap), another Twite and a magnificent male Redstart, caught in the Heli Trap.

The weekend of 20/21 April was a Copeland cracker, as the presence of the party coincided with perfect conditions and good movement of migrants. Over the weekend the catch included 15 more Goldcrests (continuing their welcome come-back following severe weather over the last few winters), 24 Blackcaps, 13 Chiffchaffs, 92 Willow Warblers (80 on 13th, mostly the males with some females), 2 Whitethroats, a Redwing and 3 Goldfinches.

The female Willow Warblers were in the majority in a catch of 26 on the morning of 28th April. Over half of the 10 Blackcaps caught on this day were also female. The new South Heli Trap showed its promise on this date during a drive about 10 am – just after a heavy rain shower – when a dozen Blackcaps and a few other warblers were present in the trap. Unfortunately, only 5 of the Blackcaps were caught as the other birds doubled back before they could be urged into the catching box. This situation illustrated clearly that small internal modifications are necessary to make the trap more effective when being driven by a small number of people, or even a single person.

Although only 2 Goldcrests were caught on 28th April, one of them had been ringed 6 months earlier in Medway (Kent area), 547 kilometres SE of the Observatory. A Grasshopper Warbler, caught on 27th April in the Pond East net is thought to have been the same bird as the one which escaped from the same part of the same net a week previously, raising the intriguing possibility that it was considering breeding there should a mate become available. April, therefore, was a pretty good month, all in all.



**Female Subalpine Warbler (© Shane Wolsey)**

Although only small numbers of migrants were ringed during the month, May was notable for the arrival of our second Subalpine Warbler on 26th, 46 years after the appearance of our first – a male on the remarkably similar date 28th May, 1967. This one, a female, was caught in the Thicket (Enclosure) net just before noon. The year's only Greenland Wheatear was also caught on this date, along with the second of the weekend's 2 Whitethroats. Spring's only 2 Lesser Redpolls – apparently a pair – were also caught on this day. The young male was ringed; the adult female was already wearing a ring, having been caught in Surrey 7 months earlier. Over the next few weeks, fledged young of Willow Warbler, Blackcap, Wren, Blackbird, Pied Wagtail, Starling, Robin and Reed Bunting were ringed in variable numbers.

### **SUMMER SEABIRDS**

Despite the current manpower shortage, ringing of Manx Shearwaters continued apace and by the end of the season 281 full grown and 295 pulli had been ringed. Of the 728 retraps handled, most were from the 90's and the "noughties" with a handful from the 1980's, 3 from 1978 and the oldest, an adult ringed on 25/07/1976. One chick from 2012 was recorded as having returned to the colony in its first year. A chick ringed on Skomer Island (Pembrokeshire) – 329 kilometres S of the Observatory – was controlled on the island on 6th April, 2013. None of the 54 chicks which were fitted with geo-locators in 2011 has been found yet – as these birds can be expected to begin to return to the colony during the summer of 2014, a huge commitment of time and effort will have to be invested in the recovery of as many of the 54 devices as possible over the next few years.

The current concentration of limited manning resources on the ringing and re-trapping of Manx Shearwaters has temporarily relegated the catching of Storm Petrels to training and demonstration status and as such, 7 Storm Petrels were ringed during 2013.

During a specially organized trip to Mew Island on 16th May, 12 new female Eider Ducks were ringed and 4 re-trapped. This was quite a surprise, as we had expected the greater proportion of the catch to consist of retraps. Meanwhile, 3 Eiders had been re-trapped on Old Lighthouse Island on 11th May.

As a result of substantial effort directed towards ringing of gulls, significant totals were achieved : 80 Black-headed Gulls (26 of which were also colour-ringed) were ringed on Mew Island, with a further 6 at the Observatory; also at the Observatory, 13 Common Gulls, 25 Lesser Black-backed Gulls, 10 Herring Gulls and 2 Great Black-backs. More Common Gulls were ringed (and colour-ringed) on Big Copeland Island.

The highlight of the summer seabird ringing season was the return – and continued success – of the Arctic Terns to the Old Lighthouse and Mew Islands, accompanied by a small number of Common Terns. During July and into early August, 255 Arctic Tern and 3 Common Tern chicks were ringed – all but 2 on Old Lighthouse Island. The main batch on Mew Island had almost all fledged by the time of the visit there on 19th July.

Finally, 20 Black Guillemot chicks and one adult were ringed during 2013, 4 of which were on Mew Island.

## AUTUMN

In contrast to recent years, Autumn migration was disappointing, although a Reed Warbler was ringed on 7th October and several infrequently handled species were also caught – a Sand Martin on 12th July, the only Spotted Flycatcher of the year the next day and a Stonechat on 14th September.

Meadow Pipits made a welcome return after a few barren years, with 21 in September and 16 in October, while Starlings also maintained their improved ringing total with 30 by the end of the season. Other interesting catches were 4 Water Rails, 3 Moorhens (best total for several years!), 2 Wood Pigeons, a Stock Dove and 2 Hooded Crows. Robins made a fair showing from late August until the end of the year, as did Dunnocks during October.

Swallows were very scarce (annual total 27) as were House Martins (1). Goldcrests and warblers passed through in small numbers, though 2 Autumn Whitethroats were welcome.

There was a single Blackcap in October - most

unusual to be so scarce. Finch numbers were low. The usual “star” of Autumn – Lesser Redpoll – was late in putting in an appearance, with 5 birds in September and in October only 39 ringed by 17th. The largest catch of the year (28) occurred on 21st October, the final day of manning. Thrushes were also scarce during October manning spells and no Sparrowhawks were caught during the year.



Reed Warbler (© Neville McKee)

**Chris Acheson**

## Answers to Identification Skills Test on Page 3:

(a) Swift (b) Redpoll (c) Tree Sparrow (d) Oystercatcher Nest (e) Wren (f) Brambling (g) Purple Sandpipers

Thanks to Kerry Leonard© for providing the pictures.



## New Jetties For Observatory

A big thank you to Tommy and Harry of TH Engineering and David and Philip Galbraith of the Copeland Bird Observatory for their hard work installing the two new jetties earlier this year. The installation work involved working long hours, sometimes by spotlight, in freezing, wet, hypothermia-inducing conditions.



New East Jetty (© Philip Galbraith)



New Gavney (South) Jetty

The new jetties look great and hopefully will mean safer trips for everyone. The new jetties were funded through a Northern Ireland Environment Agency Challenge Fund grant administered by the Northern Ireland Environment Link.

# Seasons Greetings



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