

Calf of Man Bird Observatory



Annual Report **2013**



Manx National Heritage
Eiraght Ashoonagh Vannin

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Map of the Calf of Man



The Calf of Man Bird Observatory

The Calf of Man is a rocky islet extending to approximately 616 acres and it is situated half a mile off the south-west coast of the Isle of Man in the middle of the Irish Sea. The Calf is owned and administered by Manx National Heritage (MNH) and it is run as a Bird Observatory and Nature Reserve. The island is an ideal place to study many aspects of bird life, with around 33 species breeding annually and it is located on one of western Britain's major migration routes. Breeding seabirds include Manx Shearwater, Kittiwake, Razorbill and Shag. You can also see a variety of species around the island such as Peregrine, Hen Harrier, Chough, Raven, as well as other rare and unexpected migrants.

Since 1959 organised ornithological work has been carried out on the Calf of Man from spring to autumn each year by wardens. As an accredited Bird Observatory since 1962, the Observatory meets British Trust for Ornithology (BTO) requirements. Currently, MNH contracts Manx Wildlife Trust to employ an Ornithological Warden and an Estate Warden to provide a seasonal presence on the Calf from March to November. Bird ringing is an integral part of the Observatory's work and ringing demonstrations are often held for the public.

Between 1959 and 2013, 239,373 birds (156 species) have been ringed on the island. Trapping is carried out using Heligoland Traps and mist nets.



Storm Damage to South Harbour Photo: Will Hayward

Visitor Information

The Estate Warden and Ornithological Warden are in charge of the day to day running of the islet and visitors must at all times follow their instructions.

The Calf of Man is open to the public daily. The Manx Museum and National Trust and its Bye-Laws, require that certain conditions **MUST** be observed at all times. These regulations are made in the best interests of preserving those aspects of the Calf of Man which we all treasure and enjoy.

PLEASE HELP US TO MAINTAIN THIS BEAUTIFUL ENVIRONMENT BY OBSERVING THE FOLLOWING:

- There must be no interference with the bird life or other wildlife.
- Climbing tackle and climbing is strictly prohibited.
- Dogs are not permitted.
- No camping and lighting of fires.
- Vessels must not be left unattended at any of the harbours at any time to ensure that the Calf visitor/supply boats have access to the harbours at all times.
- No fishing from 1st April to 31st July.
- Visitors must leave no litter.
- From May to July visitors must keep to paths and tracks and keep out of enclosed fields.
- Manx National Heritage expects the behaviour of visiting parties to be of a high standard. In the event of misbehaviour by any group, individual, or lack of adequate control by the adult in charge of children, the wardens have the authority to terminate the visit and ask the individual/ group to leave the islet at their own expense.
- Manx National Heritage operates a no smoking policy at all of its properties.

Visitor accommodation is available in the Observatory during the summer season – normally from May to mid-September. The accommodation consists of self-catering hostel style accommodation for up to 8 people with a visitor kitchen, lounge and log burner. Intending over-night visitors must pre-book accommodation by contacting the Calf Bookings Officer, Manx National Heritage, Manx Museum, Douglas, Isle of Man IM1 3LY Tel: 01624 648015.

During the summer season, private operators run visits to the Calf from Port St Mary and Port Erin. The vessels operate depending on weather conditions and demand. For more information, please contact:

- Juan Clague, Kionslieu, Plantation Road, Port St Mary, IM9 5AY
Tel: Mob : (07624) 490615
- Mike Keggen, Shore Road, Port St Mary, IM9 5DX
Tel: (01624) 833133 Mob: (07624) 493824
- Chris Burton, email: shonaboattrips@manx.net
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CALF OF MAN

BIRD OBSERVATORY REPORT

2013

Ornithological Warden: Will Hayward
Estate Warden: Richard Jamieson/Daniel Reynoldson

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Ornithological Warden's Report

After four hardy souls had manned the Calf for a week in January (to carry out fieldwork for the Manx Shearwater Recovery Project), the season proper (and the recording of birds and other wildlife) began on the still relatively early date of 15th February when Richard Jamieson and I arrived. Following a changeover of Estate Wardens and the arrival of Dan Reynoldson in early May, the island was staffed until we left on 9th November. Another short trip to undertake rat eradication work occurred later that month, concluding work on the Calf for 2013.

As ever, the weather dominated proceedings with an exceptionally cold start to the season (the coldest spring since 1962) resulting in low numbers of many migrant species and a delayed start to the breeding season. March was an especially harsh month with heavy snow and frequent blizzards (though unlike on the Isle of Man mainland the snow didn't settle for long) followed by violent stormy weather, which battered the south coast and caused major damage to South Harbour. Thankfully things eventually improved, and from July onwards pleasantly warm weather began to dominate, benefitting many late breeders or species on second or third broods. Conditions in early autumn were more typical and provided some excellent days of visible migration. October however, was incredibly wet and windy and as a result birding was often challenging. With the wind rarely remaining in one direction for any length of time, seawatching was also slightly disappointing.

Although there were no stand-out rarities, 2013 saw some excellent records of scarce birds. Spring highlights were a fly-by Little Egret, a stunning red male Common Rosefinch, a brief Hobby and the nine day stay of a fantastic adult Rose-coloured Starling. A now expected Yellow-browed Warbler was seen in autumn along with several notable additions to the year list, including Leach's Petrel, Brent Goose and Red-breasted Merganser. The superb post-breeding influx of Wheatears in late summer was just as memorable as was the influx of up to five juvenile Hen Harriers in August, the long staying flock of over 70 Choughs in the same month and a great autumn passage of Tree Pipits.

The breeding Manx Shearwater Survey provided one of the year's main highlights with a thorough survey covering almost the entire coastline of the island and resulting in an estimate of 305 Apparently Occupied Burrows, smashing the previous record of 147 set last year. In light of the on-going Manx Shearwater Recovery Project, the full coverage of this year's survey provides vital baseline data on the location and numbers of breeding birds immediately before the effects of the eradication will hopefully be felt.

After a quiet year for cetaceans in 2012, this year saw a return to form with a superb showing from Risso's Dolphins in July and August and some great views of Bottle-nosed Dolphins early in the spring. The Basking Shark season was sadly short-lived with up to four providing regular sightings (often very close inshore) but only during one week of settled warm weather at the start of June. Grey seals continued to prosper around the island's coastline and enjoyed their best pupping season on record. Heavy use of the moth traps (when the weather allowed!) resulted in the recording of an excellent range of species and the addition of two new micro moth species to the Calf list.

The Observatory continued to provide data for a variety of outlets. For example, daily log data was submitted to the BTO's BirdTrack survey, 161 nest records were sent to the Nest Record Scheme, roosting Hen Harriers were monitored for the National Hen Harrier Winter Roost Survey and annual Willow Warbler totals were given to a Spanish student researching the impact of climate change on migratory birds. Non-avian data was submitted to the relevant local and national organisations including the Manx Basking Shark Watch and the Manx Whale and Dolphin Watch.

Thanks are due to the many people who provided help, advice and contributed to a thoroughly enjoyable and productive season on the Calf. In no particular order these include Duncan Bridges of Manx Wildlife Trust, Shaun Murphy and Kate Hawkins of Manx National Heritage, Anne-Marie McDevitt of Manx BirdLife, Kev Scott, Juan Clague and Anne Kaye. Long staying volunteers Andrew Godden, Alice Dickson and Hannah Mitchell made vital contributions to bird survey work. Ringing cover provided by Kev, Sean Gray and Mark Fitzpatrick was also a fantastic help. Many volunteers working on the Manx Shearwater Recovery Project provided some welcome bird and wildlife records, as did several regular hostel guests and day visitors.

Estate Warden's Report

I arrived on the Calf of Man on the 2nd of May to replace the outgoing Estate Warden, Richard Jamieson, who had been the Estate Warden for the previous two years. Shamefully, I have lived on the Isle of Man for 18 years and I had never visited the Calf properly before - apart from a brief visit to South Harbour in a friend's fishing boat some years ago. So, arriving at South Harbour that evening, I had absolutely no idea what to expect. After a whirlwind couple of days where Richard showed me around the Island and tried to teach me as much as he could about how the systems within the Observatory worked, I was left alone with Will Hayward the Ornithological Warden feeling slightly apprehensive about the future. I soon settled into life on the Calf and the next seven months was full of highs and lows and would ultimately turn out to be an experience I will never forget.



The Calf of Man Bird Observatory - home for the next seven months

My duties this year included maintenance of the Observatory, dry stone walling, bracken and heather clearance, monitoring the resident herd of Loaghtan sheep, butterfly transects, volunteer supervision and collecting guests and visitors. However, my main focus this year has been the Manx Shearwater Recovery Project. This major project to eradicate the non-native population of Brown Rat ("Longtails") from the Calf in order to preserve and protect the sea bird nesting colonies, began in the winter of 2012 and will continue into 2014. The Estate Warden is a key member of the team implementing this work, through placement, monitoring and maintenance of a network of bait points and monitoring stations, as well as volunteer management for the project.

Early in June, whilst conducting the monthly check of all the monitoring stations, I found a wax chocolate block (located in the station at Bushell's House) which showed worrying signs of Longtail nibbling. This sign was duly confirmed as definite which took everyone involved with the project by surprise. The decision was made to deploy the contingency grid; a contingency plan to control and eradicate any further Longtail activity in the event of positive signs. This contingency grid involved deploying a 50 metre grid of monitoring stations surrounding the area of Bushell's House. Each monitoring station consisted of a

bait tube baited with rodenticide bait, along with Fenn kill traps positioned nearby. This involved a huge amount of effort on the part of those involved and especially, the volunteers. Without their help, it would have been extremely difficult for us to respond effectively.

Baiting Tube deployed



The contingency grid was monitored on a daily basis following deployment for three weeks, with weekly checks for a further three. Much to everyone's relief, no further signs of Longtail activity were detected.

During the summer, we had a prolonged period of dry weather and a heatwave that lasted more than three weeks. Although this was fantastic, it had serious implications for our water supply. We ran out of rainwater from our rainwater storage tanks early on and the level in the main well dropped dramatically as the surrounding areas began to dry out. This meant that we had to disappoint a number of guests by cancelling their bookings as the threat to our existence on the Calf became serious. As a result of the water shortage, we made some modifications to the toilet in the bathroom. The hill well behind the Observatory, normally used as an emergency supply of water due to it requiring greater filtration, was plumbed directly into the toilet, relieving the water demand from the main well. This had an immediate impact and it is hoped that we will be able to cope better during future prolonged dry periods.

Late in March prior to my arrival on the Calf, a particularly large storm inflicted some serious damage to South Harbour. The outer marker to the harbour entrance was completely destroyed and a large section of the breakwater collapsed. The resulting debris blocked the harbour and rendered it temporarily out of commission. Over the course of the season efforts were made to initially clear the harbour entrance and then to repair the damage. Several methods were used to move some of the boulders causing the obstruction, one of them was an ingenious method using a flotation device secured to the boulders at low tide. This method was originally pioneered by Geoff Mitchell and Ben Jones back in 2006. There was a limit to what could be achieved using these methods and Manx National Heritage are currently looking at ways to restore the outer marker and safeguard the continued use of South Harbour.

Monthly Summaries

February

Recording began on the 15th February, the day of our arrival. Five Song Thrushes and two Blackbirds were seen at the Observatory with a ringtail Hen Harrier also nearby. An adult male Hen Harrier was reported two days later by day visitors; the first sighting of an adult male since spring 2012. On the 22nd, the fresh remains of a Woodpigeon were found on Caigher Point.

The first two Eiders of the year appeared at Cow Harbour on the 23rd, when five Black Guillemots were also noted off the west coast. The first Lesser Black-backed Gull arrived on the 24th. Singles of Collared Dove and Woodcock were new in on the 26th, as was a Lapwing, heard calling from the front field after dark. A Merlin was present from the 27th to 28th on the east side of the island, with a male Sparrowhawk also seen around the Observatory on the latter date.

March

Two Snipe were flushed from the Withy on the 1st and the first four Starlings of the year were seen at the Observatory. Another Snipe was seen near the Withy on the 2nd and a Woodcock flushed on the 3rd when two female Mallards at Cow Harbour and 90 Razorbills off Big Head were additions to the year list. Conditions were wet and miserable over the next few days but a few migrants still made it through, particularly on the 5th, when a single Snipe near the back field, a Skylark over the central glen, 10 Blackbirds and a Blue Tit were all noted. Seven Lapwings were grounded in the south of the island during a heavy shower on the 9th.

The rain turned to snow on the 10th with several light flurries falling until the 12th and the night time temperature dropping to -2°C. The year's first Chiffchaff still made it through on the 11th and was joined by another the following day when a Jack Snipe was also flushed near South Harbour. The first Greenfinch of the year was in the back garden on 14th and the following day saw the only two Lesser Redpolls of the month.

An overcast morning on the 16th brought the first good arrival of thrushes including 22 Blackbirds, seven Song Thrush and the year's first Fieldfare, Redwing and Mistle Thrush. A good turnover occurred overnight with another 19 Blackbirds and 11 Song Thrush on the 17th along with 22 Goldfinches. Seven Greylag Geese were also recorded moving west off the south coast of the island.

The wind switched to the east late on the 17th and stayed there for the rest of the month. A Magpie on the 18th and a Grey Wagtail on the 19th were new additions to the year list. After 19th the wind speed increased steadily, reaching storm force on the 22nd then remaining at least at force 8 until the 25th. Driving sleet, snow and bitter cold were almost constant, so birding was, not surprisingly, difficult and unproductive. A Coal Tit somehow managed to make it into the relative safety of the Observatory garden on the 24th. The wind stayed strong for the remainder of the month with more snow falling on the 27th. A Redshank in the Puddle on the 27th, the first Wheatear of the year at Fold Point on the 29th, and the first three Linnets on the 30th were the best of the slim pickings on offer.

April

March's cold weather continued into April with an icy easterly wind blowing for most of the first week. A male Blackcap near the Observatory was new for the year on the 3rd but birding remained slow; only a Black-headed Gull off Cow Harbour, a Black Redstart in the front field and a Brambling in the back garden (all on 5th) were of note. The wind finally abated on the 6th with the daytime temperature even reaching double figures (14°C!) with 18 Goldfinches and 11 Chaffinches passing through. A good influx of 19 Blackbirds and 10 each of Redwing and Song Thrush on the 7th was bettered the next day with totals of 31 Blackbirds (including a German ringed control caught in one of the Heligoland traps), 14 Redwings, another Black Redstart, 29 Goldcrests, 13 Goldfinches (including a French control) and five Great Tits.

The 9th and 10th were blustery, overcast days, conditions which halted most of the movement, aside from the year's first Stock Dove and Rook around the Observatory and the first Manx Shearwaters of the year recorded at night at the South Harbour colony. A Dunlin near South Harbour and a Reed Bunting in the front hedge were seen during a wet day on the 11th. The overcast conditions continued into the 12th bringing an excellent selection of migrants including the first Swallow and Willow Warbler of the year, singles of Lapwing and Woodcock, 13 Robins, 17 Wheatears, 29 Blackbirds, 107 Fieldfares, 36 Redwings, 9 Chiffchaffs, 35 Goldcrests, 3 Bramblings and 20 Goldfinches.

A Grey Heron high above the north coast was seen the following day, but a strengthening southerly wind prevented much else arriving. Two Turnstones at Cow Harbour and a Golden Plover over the heath in the west of the island on the 16th were the only notable additions to the year list. A pleasant morning with sunny spells on the 19th saw the year's first Sand Martin and House Martin pass overhead along with 29 Swallows. Other migrants logged included a male Redstart, 32 Willow Warblers and totals of 104 Meadow Pipits and 23 Hooded Crows (including passage birds along with the residents). The year's first White Wagtail (after a smattering of unidentified *alba* wagtails had passed overhead in mid-April) was seen in the Lighthouse Fields on the 20th. More birds arrived over the following bright and breezy days including the first Grasshopper and Sedge Warblers on the 21st, and a Common Sandpiper, four Turnstones and an Arctic Skua (off Cow Harbour) on the 22nd. Conditions were good for finch passage with high numbers of Goldfinches moving over, peaking at 60 on the 24th.

Rain in the early hours of the 25th eased off by late morning having grounded a fine range of night migrants. Totals included an excellent 51 Blackcaps, the first Cuckoos (three) and Whitethroat of the year and two Grasshopper Warblers. The year's first Swift also flew through later in the afternoon. One Cuckoo remained on the 26th, and a few more birds trickled through on the 27th including a female Black Redstart in the front lane. The northerly wind strengthened in the afternoon and saw four Black-headed Gulls, a Common Gull and a Bonxie fly north past Cow Harbour. The good run of Black Redstarts continued with new birds arriving on the 28th, 29th and 30th. A Tree Pipit caught early in the morning was a welcome surprise on the 28th (the first to be ringed in spring since 2000). Moderate westerly winds for the rest of the month prevented much more migration but two Whimbrels and 14 Purple Sandpipers were seen from a boat on 30th.

May

The 1st saw a decent arrival of migrants in cool breezy conditions. Totals included a male Sparrowhawk, two Woodpigeons, a Sand Martin (a real scarcity this spring), 42 Wheatears, a Grasshopper Warbler (trapped and ringed at the Observatory), 12 Blackcaps, 34 Willow Warblers and a female Crossbill. A turnover of birds occurred overnight with a female Black Redstart, 55 Wheatears, another Grasshopper Warbler, 24 Blackcaps, a Coal Tit and 90 Goldfinches all logged on the 2nd. Things quietened down as the westerly wind strengthened over the next few days but female Redstarts were still recorded on the 3rd and 5th, along with an excellent record of a singing male Pied Flycatcher in the back garden also on 5th – the first spring record since 2008.

The only Magpie of the month was seen on the 6th and on the 7th good numbers of hirundines moved east above the north coast with 128 Swallows and 11 House Martins logged in a couple of hours. A strong south-easterly wind on the 8th wasn't the most promising for migration but did produce a couple of good records with a late Merlin seen near Fold Point and the first Spotted Flycatcher of the year in the back garden. Wind speed reached force 8 overnight and conditions remained blustery and wet right through to 15th. Two Kestrels and a Whimbrel on the 11th and four Turnstones and a Common Sandpiper the following day were the most notable sightings. A fine male Whinchat was recorded on the 15th with a female present on the 16th. Calm conditions at last, with a very slight easterly breeze also saw 25 Wheatears, a Tree Pipit, 6 Jackdaws and 24 Redpolls arrive.

An excellent day on the 17th saw the year's first two Garden Warblers trapped and ringed at the Observatory. Totals for the day included three Tree Pipits, a female Redstart, a Mistle Thrush, 12 Sedge Warblers, 13 Whitethroats, two Rooks and another 25 Redpolls. A wet start and a thick mist setting in during the afternoon meant 18th was a quieter day but a Cuckoo was seen near the Silo and seven Spotted Flycatchers were present in the central glen. Calm conditions at dawn on the 19th saw another good arrival including a Cuckoo (a different bird to that on 18th), 43 Wheatears, 15 Sedge Warblers, 16 Whitethroats, 31 Willow Warblers and 13 Spotted Flycatchers. Hirundine passage also picked up with 105 Swallows and 22 House Martins logged. Most birds cleared out overnight with only a handful of new migrants grounded on the 20th including a female Whinchat and a Garden Warbler. Good totals of 118 Swallows and 34 House Martins also passed over. The first four Eider ducklings were seen at South Harbour and a pair of Wigeon flushed from the beach at Cow Harbour was a welcome addition to the year list.

After a forgettable day on the 21st the only Grey Wagtail of the month flew over South Harbour on the 22nd and 76 Swallows were recorded. A strong north-north westerly wind produced the first two Sandwich Terns of the year past Cow Harbour on the 23rd and saw a Puffin and Little Egret (only the third Calf record) fly north past Culbery on the 24th (along with 288 Gannets and 138 Kittiwakes).

The first Short-eared Owl of 2013 on the heath near the Mill Pond was the highlight of a beautiful calm day on the 25th. A fantastic red male Common Rosefinch was plucked from a mist net in the back garden early on the 26th and was heard singing later in the day. After a washout on the 27th, conditions were blustery for the rest of the month. Relatively few new migrants were grounded; the highlight being a female Whinchat on the 30th.

Good numbers of Swallows and House Martins flew over with peak counts of 89 Swallows on the 28th and 39 House Martins on the 31st. Six Swifts on the 28th and three on the 31st were also notable.

June

A sunny start to the month with a light southerly breeze provided good conditions for visible migration. Two Jackdaws were seen flying over the Observatory soon after dawn and total of 46 Swallows and 22 House Martins were logged. A female Crossbill dropped in to the front garden during the morning and a Common Sandpiper was also seen at South Harbour. On the 2nd, a high count of seven Collared Doves flew out of the back garden and the hirundine passage continued with a single Sand Martin, 50 Swallows and 31 House Martins over. A monthly peak count of 18 Lesser Redpolls was made and two Siskins were also present. A small arrival of warblers occurred overnight with three Sedge Warblers, 11 Whitethroats and seven Willow Warblers seen on the 3rd with a male Whinchat also noted singing near the Withy. Bright and breezy weather on the 4th and 5th saw only a trickle of migrants come through, though this did include a Crossbill and female Kestrel on the 4th and a female Redstart and Jackdaw the following day.

Following a quiet day on the 6th, a Cuckoo was present near the Observatory on the 7th, with five Swifts and a Tree Pipit passing overhead. The highlight of the month (and the year so far) appeared on 8th when a fine Rose-coloured Starling was discovered near the Withy late in the morning. The bird was seen sporadically right through to the 16th, always in the same small corner of the Lower Withy Field feeding among the rabbits. Two Puffins were on the sea off the Stack, nine Jackdaws flew over first thing, the first juvenile Starling appeared and singles of Song Thrush and Grey Wagtail were also seen.

After this excitement things quietened down over the following week as conditions became more unsettled with frequent rain showers. Two Black-headed Gulls flying north past Cow Harbour on the 11th were the only ones to be recorded during the month. A real highlight was provided by a Hobby that zoomed past Big Head and continued on south-west above the cliffs on the 13th.

An 'eared' owl species seen briefly after midnight hunting near South Harbour on the 15th was followed by a confirmed sighting of a Short-eared Owl over Cow harbour three days later. The first Tree Sparrow of the year was a surprise find at the Observatory on 17th as little else appeared to be on the move. A flock of 240 Kittiwakes roosted on rocks at the end of Rarick on the 19th and three Puffins were also seen on the water close to the north coast. A seawatch from Culbery the following day was productive with 421 Manx Shearwaters recorded in one hour. Windier conditions over the next week saw more seabirds on the move including another good count of 353 Manx Shearwaters off Culbery on the 23rd in a force 6 south-westerly.

Calm and sunny conditions on the 25th saw a Spotted Flycatcher in the Withy and on the 26th, June's only record of Lapwing. A monthly peak of 41 Starlings on the 27th was the last notable sighting.

July

On 1st a Blackcap was the only migrant of note during a sunny day with a light south-westerly breeze. The wind speed picked up to force 6 the next day so a seawatch was in order – 278 Manx Shearwaters and a Black-headed Gull were the pick of the sightings past Cow Harbour over 90 minutes. After a couple more blustery days, (from which a wandering flock of 54 Choughs on the 3rd was the only highlight), a high pressure system settled in bringing three weeks of glorious sunny weather with almost no wind. The temperature reached a peak of 28°C (in the shade!) on the 11th, but remained in the twenties for most of the month.

A single Whimbrel and two Redshanks on the 6th heralded the start of a good spell for wader sightings. Up to three Redshanks were seen over the rest of the month along with up to two Curlews. The first two returning Common Sandpipers appeared on the 14th, after which sightings were regular, peaking at four on the 18th. A migrating Greenshank was heard as it flew over the Observatory at 02:00 on the 16th (the first record since August 2009). On the 17th, a single Lapwing was seen in the south of the island, with a flock of six present at Cow Harbour two days later. The only Dunlin of the month flew over the heath near the Cletts on the 24th when a Whimbrel was also seen. On the 27th a Snipe was flushed from the Withy and two Golden Plovers were in the Withy and Sea Fields, where they remained for the next day.

The first small influx of juvenile passerines occurred on the 7th with singles of Blackcap, Chiffchaff, Willow Warbler and House Sparrow (the first of the year). A juvenile Treecreeper was caught in the back garden on the 8th where it remained until the 11th. The first Sedge Warbler was seen in the Withy on the 11th and a flock of 10 Swifts flew over. On the 12th, the month's only Mistle Thrush was present near the Observatory during the morning. Flyover Grey Wagtails were recorded on the 15th and 17th, with a flyover Crossbill also seen on the latter date.

Twenty Common Scoters flew past Cow Harbour on the 19th and five Black-headed Gulls were seen around Fold Point, but little else was on the move at sea.

Migrant numbers increased slightly during the final week as the weather became more unsettled. A turnover of up to five Willow Warblers occurred daily and single Sedge Warblers were seen on the 24th and 28th. Wheatears enjoyed an excellent breeding season and good numbers (up to 36) were seen each day. Goldfinches evidently did well too as a post-breeding influx resulted in a peak count of 63 on the 27th.

August

After the 1st, when one Common Sandpiper was seen, there was a gap in coverage until the 6th. On this date five Common Sandpipers were at South Harbour and a Sedge Warbler was mist-netted in the Withy.

Calm conditions on the 7th saw a small arrival of migrants with two Sparrowhawks, 100 Swallows, six House Martins, seven Whitethroats and 30 Willow Warblers logged. After a turnover of birds overnight, 95 Meadow Pipits, 40 Wheatears, a Sedge Warbler and

30 Willow Warblers were recorded on the 8th. The first Blackcap since early July was grounded on the following day along with 8 Whitethroats. Wagtail passage began on the 9th when 20 Pied Wagtails were recorded, with a further 28 present on the 10th (when a further five *alba* wagtails also flew overhead). Blustery conditions meant migration had slowed right down by the 11th with only another Blackcap and five Common Sandpipers of note and little else was present the next day.

Conditions on the 13th were good for visible migration with a light north-westerly wind blowing throughout the day, but little was on the move aside from a Sparrowhawk and the first three Tree Pipits of the autumn. Thick fog throughout the 14th and 15th scuppered birding plans but a change in the weather overnight brought a good day on the 16th. Another three Tree Pipits were logged along with three House Martins, 96 Meadow Pipits and the first Spotted Flycatcher of the autumn. A force seven south-westerly with frequent showers meant the following day was hard work but a 90 minute seawatch from Culbervy was rewarded with 510 Manx Shearwaters passing offshore. Six Dunlins and 13 Curlews were seen over the sea during a windy morning on the 18th. The wind abated slightly in the afternoon allowing a few migrants to be discovered in the central glen. Most notable were singles of Pied Flycatcher, Whinchat and Tree Pipit as well as two Spotted Flycatchers. Four Hen Harriers were also logged and they remained on the island until the month's end, with a fifth bird present on the 25th at least.

An excellent seven Tree Pipits flew over during the morning of the 19th, with a further four recorded on the 20th. These accompanied good numbers of Meadow Pipits, with 110 counted on the 19th along with a Snipe that flew over at dusk. A brief look out to sea during a clear spell on an otherwise foggy day on the 21st yielded the first (and only) Common Scoter of the month. After another misty day, conditions at dawn on the 23rd were warm and sunny producing an excellent day of birding. A flyover Yellow Wagtail was the highlight (the first record since August 2011). Other sightings included a Whimbrel, 150 Meadow Pipits, eight Tree Pipits, 90 Swallows, 33 *alba* Wagtails, 30 Wheatears and a high count of 66 Choughs. The Choughs were mostly in one flock feeding in the front field where they were subsequently seen each day for the rest of the month. A good range of migrants continued to pass overhead including 122 Swallows and a Golden Plover on the 24th and a Skylark, 93 *alba* Wagtails, six Grey Wagtails and five Tree Pipits on the 25th.

The light northerly and north-easterly winds in the final week failed to yield any rarities but singles of Pied Flycatcher and Whinchat from the 27th to 28th were notable and 120 *alba* Wagtails on the 28th (most of which were White Wagtails) was a good count. The first five Chiffchaffs of the autumn arrived on the 29th, but numbers of Willow Warblers were low with only four double-figure counts in the last half of the month. Two Golden Plovers over the south of the island on the 31st were the final notable sightings.

September

A Tree Pipit and 31 *alba* wagtails flew overhead on the 1st, but the fairly strong westerly wind meant most birds present were leftover from August (including a high count of 71 Choughs still feeding in the front field). Similar conditions over the following days saw another Tree Pipit fly over on the 2nd when two Whitethroats may also have been new in. A small influx of 12 Chiffchaffs was noted on the 3rd along two Sparrowhawks, 40 Swallows, 3

House Martins, five White Wagtails, 10 Robins and two Lesser Redpolls. The month's peak of only three Spotted Flycatchers was recorded on the following day when two Arctic Skuas were also noted off Culbery.

The wind direction changed to the north-west on the 5th (where it remained for the next 10 days) and produced a small increase in visible migration with three Tree Pipits, a Sand Martin, 47 Swallows, 11 House Martins and six Grey Wagtails logged. Two more Tree Pipits were seen on 6th along with the month's only Whimbrel at Cow Harbour. With the wind strengthening on the 7th attention turned to the sea where six Common Scoters and a Red-throated Diver moved south. August's only Bonxie flew south past Culbery on the 8th. The first three Jackdaws since June were around the Observatory that morning with a flock of 23 Rooks and a Blackcap was seen in the bushes. A single Tree Pipit was the only migrant of note on the 9th.

On the 10th singles of Red-throated Diver and Arctic Skua were recorded on a morning seawatch from Cow Harbour and a Peregrine came in off the sea. Meadow Pipit passage picked up on the 11th with counts exceeding 200 for the next three days, peaking at 285 on the 13th. The Robin count reached 20 on the 11th and seven Grey Wagtails were seen on the 12th but warbler numbers remained low. Ten Willow Warblers on the 12th was the highest count of the month and 11 Chiffchaffs were recorded on the 13th. Two Grey Herons in the south of the island, also on the 13th were the first since April. The first Skylark for several weeks, another Tree Pipit and a Redshank at Cow Harbour were the pick of the sightings on the 14th.

A force 7 westerly wind on the 15th produced reasonable counts of 690 Gannets and 153 Manx Shearwaters plus a Red-throated Diver during two and a half hours seawatching, but a shift to the north-west overnight meant the following day was much better. Singles of Great Northern Diver and Leach's Petrel passed Cow Harbour (both were additions to the year list) along with four Red-throated Divers, 420 Gannets, three Dunlins and an Arctic Skua. Two Eiders in Cow Harbour on the 17th included the first male for several months.

Migration was generally slow in settled conditions over the following week but notable sightings included the first Merlin and Great Tit of the autumn on the 21st and a passage of 50 House Martins and 58 Swallows on the 22nd. The wind switched to the eastern quarter on 23rd where it remained for the rest of the month delivering an increase in migrants. A good count of 510 Meadow Pipits was made on the 25th, along with nine Grey Wagtails, 15 Chiffchaffs, 13 Goldcrests and singles of Blackcap and Whitethroat. Early mist on the 27th grounded 37 Robins, 46 Chiffchaffs, two Willow Warblers, six Blackcaps and the first six Dunnocks of the autumn. Finch numbers also increased with 31 Goldfinches seen around the Observatory. A clear night resulted in the expected mass clear out and the following day was quiet with the month's first Reed Bunting the only notable record. Four Golden Plovers flew south during the 29th and nine Black-headed Gulls flew past Cow Harbour. With an increase in wind strength to force 5-6 on the 30th and heavy showers all day it seemed the chance to find a good bird during the month had passed, but thankfully a Yellow-browed Warbler gave itself away in the front hedge, calling persistently for much of the morning.

October

The first few days of the month were dominated by strong south-easterly winds and heavy rain. Singles of Snipe were recorded on the 1st and 2nd with a Whimbrel also present on the latter date. The first two Ring Ouzels of the year were seen on 2nd, with one remaining in the back garden until the 4th when slightly lighter winds also saw the arrival of two Sparrowhawks, two Grey Wagtails, a Blackcap, 10 Chiffchaffs and the first Redwing of the autumn.

The next notable sightings occurred on the 9th with singles of Merlin and Ring Ouzel, but much better was to come the next day. A brisk northerly wind and overcast conditions at dawn on the 10th heralded a good arrival of thrushes including 150 Redwings and 37 Song Thrushes. Once the mist had lifted visible migration picked up yielding counts of 41 Skylarks, eight Grey Wagtails, three Rooks, 104 Chaffinches, 17 Greenfinches and one Swallow. More birds were grounded the following morning including 16 Robins, 94 Redwings, a Mistle Thrush, two House Sparrows and a male Wigeon that had roosted overnight on the Mill Pond. A Jack Snipe was flushed in the Upper Withy field later on in the day. The good birding continued on the 12th and 13th with highlights including four Sparrowhawks, a single Lapwing, 13 Great Tits, two Coal Tits, seven Magpies, 90 Chaffinches and a Brambling on the 12th and a Redshank, two Ring Ouzels and 20 Siskins on the 13th. Much stronger winds from the north north-east on the 14th and 15th saw little of note arrive.

A switch to a moderate east south-easterly wind on the 16th produced the first Woodcock of the autumn, along with a Ring Ouzel and a Bonxie off the west side. The first Teal of the year was present early in the morning on the 17th on the Mill Pond but little else was seen on what turned out to be a fairly miserable and wet day. The following five days were generally overcast with regular showers and a strong southerly wind; as a result birding was very slow. The few sightings of interest included seven Golden Plovers flying south on the 20th and another Woodcock also seen that day. The highest monthly count of Goldcrests was made on the 21st: a meagre 21.

A change to a strong westerly on the 23rd meant seawatching was on the cards. A five hour stint looking out from Cow Harbour was productive with two new species added to the year list: Brent Goose (three) and Black-throated Diver (one). A Great Northern Diver, three Red-throated Divers, a Bonxie, 14 Back-headed Gulls and 198 Kittiwakes were also recorded. The wind dropped right down overnight and calm conditions on the 24th produced an excellent mornings birding until the rain arrived shortly after lunch. 147 Skylarks, 40 Meadow Pipits, 11 Swallows, eight Rooks and seven Jackdaws all flew south. Other totals included three Merlins, three Bramblings, 35 Goldfinches and 60 Redpolls. Nearly 30 Redpolls were trapped and ringed, all of which proved to be Lessers.

Conditions over the final week were more unsettled with a strong southerly wind on the 25th and 26th switching to the west on the 27th where it remained for the rest of the month, often accompanied by heavy showers. A good influx of thrushes occurred on the 25th with 65 Blackbirds, 50 Song Thrushes and singles of Ring Ouzel and Mistle Thrush (both of which were also present on the 26th) recorded. 27 Turnstones and two Purple Sandpipers were on the rocks at Cow Harbour on the 28th but seawatching from the same location was

generally unproductive. The few notable records included an Arctic Skua south on the 27th and a Black Guillemot 220 Gannets and 275 Kittiwakes south on the 28th. A Jack Snipe was flushed at the Mill Pond on the 30th and flocks of Starlings began to pass through early in the mornings, with a maximum count of 127 on the 31st.

November

The first Red-breasted Merganser of the year enlivened an otherwise quiet day on the 1st when it flew north through the Sound late in the afternoon. Little of note was seen until the 3rd when a Purple Sandpiper and a Black-headed Gull were at Cow Harbour. A small influx of migrants then occurred overnight, with a Woodcock flushed along the front hedge early in the morning of the 4th and 21 Blackbirds and 27 Song Thrushes counted near the Observatory. Three Redpolls also flew north above the central glen. Heavy rain for a couple of hours before dawn on the 5th grounded more thrushes, yielding totals of 60 Blackbirds, 60 Redwings, 45 Song Thrushes and five Fieldfares. The only Brambling of the month was seen with 80 Chaffinches in the back garden Sycamores, three Coal Tits were new in and a count of four Hen Harriers was also made.

Wet and windy weather meant the 6th and 7th were quiet days with only a group of seven Mistle Thrushes and a Blackcap of note on the 6th. Dry and breezy conditions on the 8th saw overhead migration pick up again. 270 Starlings moved through early in the morning and 225 Woodpigeons were watched flying west high above the Observatory before they scattered to the ground after attracting the attention of the local Peregrine pair! Two Merlins were seen in the north of the island and 20 Turnstones and a Purple Sandpiper were at Cow Harbour just before dusk. The final sightings of the season were made on 9th and included the first four Greenfinches of the month in the back garden along with seven Great Tits.



Common Rosefinch **Photo: Will Hayward**



Skylark **Photo: Will Hayward**



Sea Milkwort Photo: Will Hayward



Hen Harrier Photo: Will Hayward

Systematic List

The List follows the sequence and scientific names given in the British List: A Checklist of Birds of Britain (7th edition) published in Ibis Volume 148, 526-563 by the British Ornithologists' Union (BOU), updated by the British Ornithologists' Union Records Committee: 40th Report (October 2011) published in Ibis (2012) 154, 212-215. A total of 121 species was recorded during 2013.

Greylag Goose *Anser anser*

The only record of the year occurred on 17th March when seven flew west above the south coast.

Brent Goose *Branta bernicla*

Three flew south past Cow Harbour during a seawatch on 23rd October. The 20th Calf record and the eighth to have occurred in October.

Shelduck *Tadorna tadorna*

Common Shelduck

Thunnag y Scape

Between the 26th March and 16th June, a pair were regularly seen in the south of the island, mainly on Rarick or around Leodan. An additional pair was seen occasionally at Cow Harbour from the 11th April. On four occasions from late April into May only the drake was seen, but there was no further evidence of any breeding attempt.

Wigeon *Anas penelope*

Eurasian Wigeon

Thunnag veg feie

A pair rested on the beach at Cow Harbour during low tide on the 20th May. A male flushed from the Mill Pond just before dawn on the 11th October was more typical in terms of date.

Teal *Anas crecca*

Laagh Laaghag

One was seen on the Mill Pond in the morning of the 17th October before it was flushed and flew up the glen. A single flushed from the Front Field early the following day was probably the same bird.

Mallard *Anas platyrhynchos*

Thunnag feie

A pair were seen on several dates during March around Cow Harbour, often joined by a second female. Four ducks and one drake were present at the beginning of April. By the end of the month it was clear that there were two pairs on the island; one in the north and a second seen either on Caigher or near Rarick. Sightings of a drake only around the Puddle in late May and June suggested the duck may have been incubating. This was confirmed on the 21st June when a female with a brood of ten ducklings was found on the Mill Pond early in the morning (the first confirmed breeding since 2009). There were no subsequent sightings of the ducklings. Up to five adults were then seen occasionally through to the 9th November.

Eider *Somateria mollissima***Common Eider***Laagh Loughlinagh*

After the first two birds on the 23rd February numbers increased daily through to a maximum count of 87 on the 19th April. The first ducklings were seen on the 20th May at South Harbour and a total of 26 nests or broods recorded. Most breeding attempts were concentrated around Rarick or to the north west of South Harbour, though several isolated nests were found scattered across the island. As usual, predation of ducklings, mainly by Great Black-backed Gulls was rife, especially in the Cow Harbour area. Sightings began to drop off from mid-June and into July with no double-figure counts after the 22nd June. From August to the end of the season there were only 14 records of up to two birds, with the final sighting occurring on the 29th October.

Common Scoter *Melanitta nigra*

No spring records this year and the species was not recorded until the 19th July when 20 flew south past Cow Harbour. Autumn seawatching only produced five further records of up to six birds, with the last record of two south occurring on the 30th October.

Red-breasted Merganser *Mergus serrator*

A female or immature flew north through the Sound on the 1st November. The last record was of two birds on 6th October 2011.

Annual bird-day totals of Red-breasted Mergansers, 2005-2013

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird-days	0	0	0	1	0	0	2	0	1

Red-throated Diver *Gavia stellate***Red-throated Loon***Lhargey Mooar*

With no records in the first half of the year, it was not until the 7th September when the first bird was seen, flying south past Cow Harbour. There were six further records through to the 2nd November, with a maximum count of four on the 16th September.

Black-throated Diver *Gavia arctica*

A single moving south past Cow Harbour on the 23rd October was the only record, occurring on a good day of diver passage when all three common species were seen.

Great Northern Diver *Gavia immer***Great Northern Loon***Arrag Vooar/Thummeyder*

Singles flew past Cow Harbour on the 16th September and 23rd October.

Storm Petrel *Hydrobates pelagicus***European Storm Petrel***Kitty Varrey*

Only recorded during night-time mist netting at South Harbour in August, with a peak count of 12 on the 10th.

Leach's Petrel *Oceanodroma leucorhoa*

One flew south past Cow Harbour close to the shore on the 16th September, following a prolonged period of strong north-westerly wind.

Manx Shearwater *Puffinus puffinus*

Scraayl

Birds were first noted in the South Harbour colony visiting burrows at night on the 10th April. The first offshore record occurred a few days later, with two south off Culbery on the 14th. The species was then recorded on most seawatches through to the final record on the 16th September. Three figures counts were made each month from June onwards, with a peak of 510 past Culbery in 90 minutes on the 16th August. See the 'Manx Shearwater Breeding Report' section for details and results of this year's survey

Fulmar *Fulmarus glacialis***Northern Fulmar**

Eean Croymmagh

Recorded in every month from the start of the season. Spring seawatching yielded peak counts of 122 on the 14th April and 23rd May. Breeding birds were surveyed in mid-June, with a combination of boat and land-based counts producing a total of 94 apparently occupied sites (AOS), down from 118 in 2012. As in the previous two years, productivity was thought to be very poor with fewer than ten large chicks seen in the nests that could be viewed safely from the land. No chicks fledged from Giau Yiarn which holds the highest concentration of breeding pairs. Numbers offshore were low throughout the autumn with a peak of only 86 off Culbery on the 15th September. Birds returned to breeding ledges from late autumn with the final count of 25 made on the 9th November.

Gannet *Morus bassanus***Northern Gannet**

Gant

Seen offshore almost daily from the 4th March through to the end of the season. Three-figure counts were made on three occasions during the spring, but the highest numbers were recorded in the autumn, particularly during September and October. The daily maximum was 690 counted during two and a half hours of seawatching on the 15th September.

Cormorant *Phalacrocorax carbo***Great Cormorant**

Arragh Vooar

Recorded every month from March onwards. In spring the highest daily count was three, but up to five were recorded on most days in July. Higher numbers were seen later in the autumn, particularly around the Sound, with three double figure counts made, peaking at 12 on the 10th September.

Shag *Phalacrocorax aristotelis***European Shag**

Fannag/Feeagh Varrey

Seen daily from the start of the season. Incubation was underway in the main colonies at the beginning of March and 210 apparently occupied nests (AON) were recorded around the island (see the 'Notes on Breeding Seabirds' section for details of productivity at the monitored colonies). Post-breeding flocks started to build up from mid-June, with large rafts of birds noted mainly in the Sound and off Kione Roauyr. 429 were counted on the

16th August but large numbers remained through to the end of September, with 320 seen on the 30th. Numbers tailed off from October with up to 75 birds seen through to early November.

Grey Heron *Ardea cinerea*

Coayr/Coayr ny Hastan/Coayr Glass

One flying west above the north coast on the 13th April was the only spring record. Two seen in the south of the island on the 13th September were then seen intermittently to the end of the season.

Little Egret *Egretta garzetta*

One flew north past Culbery, approximately 200m offshore on the 23rd May. This was only the third Calf record, after singles on 11th June 1998 and 14th June 2011.



Little Egret Photo: Will Hayward

Hen Harrier *Circus cyaneus*

Northern Harrier

One or two ringtails were seen on most days in February, with an adult male also recorded on the 17th. Up to three ringtails were then seen until early May after which only a single adult female remained and failed to attract a mate for the second year running. The first dispersing juvenile arrived on the 10th July but it was not until mid-August that numbers began to build up. A peak count of five was made on the 25th August, all seen in the air together above the Upper Withy Field! Up to four were seen through to the end of the season, though several roost watches yielded only single birds.

In October, we were made aware of an exciting Hen Harrier record involving a satellite-tagged juvenile from Langholm Moor, Dumfries and Galloway. The young female,

nicknamed “Miranda” roosted on the Calf on the 12th October and became the first satellite-tagged Harrier to be tracked moving across to the Isle of Man. Her stay was a short one, however, as she was recorded on the eastern side of Ireland only two days later and has subsequently wandered widely over the country, settling in County Mayo at the end of the year (many thanks to Stephen Murphy of Natural England for contacting us with the details).

Sparrowhawk *Accipiter nisus*

Eurasian Sparrowhawk

Shawk/Shirragh/Shirragh ny Giark

After the first on the 28th February, the species was seen on only seven further dates in the first half of the year. Autumn passage began with two on the 7th August. One or two were then seen on most days through to the end of the season, along with totals of three on the 25th August and 9th October and four on the 12th October.

Kestrel *Falco tinnunculus*

Common Kestrel

Stannair Ruy

Seen from the 27th February with up to two then recorded sporadically until the 11th May. There was no evidence of any breeding attempt with only a lone female summering. Two were seen on the 14th July but it was not until mid-August that the species became regular again with one or two seen on most days until the 17th October.

Merlin *Falco columbarius*

Singles were seen on nine dates between the 20th February and 8th May. Autumn passage was fairly late, starting on the 21st September. One or two were seen regularly through to the end of the season and a peak count of three was made on the 24th October.

Hobby *Falco subbuteo*

One first seen above Kione Roauyr on the 13th June; it then flew south-west along the cliffs towards Kione ny Halby. This was the first since 2005 and is only the 21st Calf record (15 of these have occurred in spring).

Peregrine Falcon *Falco peregrinus*

Peregrine Falcon

Shirragh y Ree

A pair were seen regularly during the spring from the start of the season, with additional birds noted on the 27th March (an adult flying across at Cow Harbour) and 27th May (a second-year in the front field). Disappointingly, and despite much effort watching and searching likely areas, there was no evidence of any breeding attempt this year. The pair remained in residence until the end of the season and an immature arriving in off the sea on the 10th September was the only confirmed sighting of a different bird during the autumn.

Oystercatcher *Haematopus ostralegus*

Eurasian Oystercatcher

Garee breck/Bridgeen

Recorded on most days throughout the season. Fifteen breeding territories were mapped, spread fairly evenly around the coast. Ten nests were monitored, from six of which eleven young were raised to a large size. Most, if not all of them were thought to have fledged.

Autumn numbers were fairly low with only two counts exceeding twenty birds; 22 on the 15th September and 21 on the 1st October.

Golden Plover *Pluvialis apricaria*

European Golden Plover

Ushag Reeast/Fedjag Reeast

In spring, singles were recorded flying over on the 16th and 19th April. Return passage began with two birds on the 27th July, both of which stayed for a second day. Singles flew over on the 24th and 26th August, with two recorded on the 31st. Four on the 29th were the only September records but sightings increased in October with singles on three dates; a flock of seven above the central glen on the 20th and five moving south at sea on the 23rd.

Lapwing *Vanellus vanellus*

Northern Lapwing

Earkan

In the first half of the year singles were recorded on the 23rd February, 12th April and 26th June. A group of seven were also seen in the Sea Field on the 12th March. July sightings involved a single on the 17th and a group of six on the 19th. After which there were no further sightings until October when a single at Cow Harbour on the 19th was the final record of the year.

Purple Sandpiper *Calidris maritima*

The only spring record was of a group of 14 roosting in a cave beneath the Upper Lighthouse on the 30th April. In October two were seen at Cow Harbour amongst a large flock of Turnstones on the 28th. Singles were then recorded at the same location on the 3rd and 8th November.

Dunlin *Calidris alpina*

One at South Harbour on the 11th April was the sole spring record. In the second half of the year one flew over the heath above the Cletts on the 24th July, six flew south at sea past Culbery on the 18th August and three moved south past Cow harbour on the 16th September.

Jack Snipe *Lymnocyrtus minimus*

One was flushed from the slope above South Harbour on the 12th March. The last spring record was on the 4th April 2010. Singles were recorded on two dates in October; in the Upper Withy Field on the 11th and by the Mill Pond on the 30th.

Snipe *Gallinago gallinago*

Common Snipe

Coayr Heddagh

A good series of early spring records; two on the 1st March were followed by singles on six further dates up to the 8th April. Return passage began with one in the Withy on the 27th July. Singles were then recorded on three days in August, two days in September and four days in October with the final record occurring on the 12th.

Woodcock *Scolopax rusticola*

Eurasian Woodcock

Ushag Rennee

In the first half of the year single birds were flushed from dense vegetation on the 23rd February, 3rd, 24th and 25th March and the 12th April. Singles on the 16th and 20th October and the 4th November were the only autumn records.

Whimbrel *Numenius phaeopus*

Two on the 30th April and one on the 11th May were the only spring records. A single on the 6th July was followed by further singles on two dates in August, one date in September and the final record on the 2nd October.

Curlew *Numenius arquata*

Eurasian Curlew

Crottag

Up to five were recorded on most dates from the start of the season up to the 4th April. Sightings then dropped off dramatically with only one further record of a single later in the month and then a gap in records until two on the 21st June. After two further sightings that month, two birds were seen throughout July, mainly near Cow Harbour. Numbers picked up in August, with double-figure counts most days after mid-month and a peak count of 27 on the 21st. Up to 22 were seen daily up to early September when counts decreased with mainly single figure counts from then until the final record on the 3rd November.

Monthly bird-day totals and peak counts of Curlews

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	7	32	7	0	4	16	275	232	121	5
Max count	2	5	3	0	2	2	27	22	14	2

Common Sandpiper *Actitis hypoleucos*

In spring, singles were recorded on five dates between 22nd April and 1st June. Autumn passage was brief with birds recorded on eleven dates between 14th July and 11th August. Peak counts of five were made on 6th and 11th August.

Redshank *Tringa tetanus*

Common Redshank

Goblan Marrey

Spring records involved singles on 27th March and 4th April. Up to three birds were seen in July after which there was a gap in sightings until singles were seen on four dates in September. One on 13th October was the final record. All sightings occurred around the Puddle or at Cow Harbour.

Greenshank *Tringa nebularia*

One flew over the Observatory calling at 02:00 on 16th July. The first record since one at Cow Harbour on 17th August 2009.

Turnstone *Arenaria interpres*

Ruddy Turnstone

Goblaghan

In spring up to four were seen on seven dates between 16th April and 25th May. An adult at Cow Harbour on 24th August was the first record of the autumn, with another single occurring later that month. After a blank September, a flock of 27 birds was seen at Cow Harbour at high tide on 28th October. There were four further records of up to 20 birds in the same area until the final sighting on 9th August.

Arctic Skua *Stercorarius parasiticus***Parasitic Jaeger**

A dark phase bird that flew south past Cow Harbour on 22nd April was the first of the year. A single on 23rd May was the only other spring record. Autumn passage was very light. After the first two passed Culbery on 4th September, five singles were recorded on seawatches, with the final sighting on 30th October.

Great Skua *Stercorarius skua*

One that flew past Culbery on 27th April was the only record during the first half of the year. There were only three autumn records from seawatches; single birds on 8th September and 16th and 23rd October.

Kittiwake *Rissa tridactyla***Black-legged Kittiwake***Perragh*

Birds were seen offshore from 11th March but the first movement of any note occurred on 24th May with 138 past Culbery in two hours. In June up to 134 birds were frequently seen feeding off the north-east coast near the Stack. Large numbers were also recorded around the Puddle through to mid-July, with a peak count of 253 on June 19th, seen roosting on the rocks at the end of Rarick.

The species had another poor breeding season, as has been the trend of recent years. Thirteen AON were counted on Big Head during the boat-based survey on 19th June. There was no follow up visit to check on success. No birds were recorded at the traditional site on Caigher Point this year.

The autumn was extremely quiet with only occasional records until late October, when numbers peaked at 275 offshore in three hours.

Monthly bird-day totals and peak counts of Kittiwakes

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	0	78	123	226	1416	779	29	58	815	112
Max count	0	38	46	138	253	191	10	14	275	93

Black-headed Gull *Chroicocephalus ridibundus**Pirragh*

In April, one and four birds flew north past Cow Harbour on 5th and 27th respectively. Two were seen on 11th June and there were five records in July of up to five birds, always off the north of the island. Nine past Cow Harbour on 29th September were the first of the autumn and were followed by three records in October, with a maximum of 14 on 23rd. One on 3rd November was the last record.

Common Gull *Larus canus***Mew Gull***Foillan Vane*

One off Cow Harbour on 27th April was the sole spring record. Autumn was exceedingly quiet with only two singles recorded, on 10th and 30th October, both also off Cow Harbour.

Lesser Black-backed Gull *Larus fuscus*

Foillan Saggyrt

First recorded on 24th February, then seen regularly from mid-March. 38 breeding pairs were mapped, half of which were in the mixed colony at the Wall. Though no specific monitoring was carried out, breeding success was judged to be fairly poor with 12 large young located in several thorough searches. After most of the breeding birds had dispersed by mid-August, sightings were very scarce with only two records in September and two in October, with the final sighting on the 9th.

Herring Gull *Larus argentatus*

European Herring Gull

Foillan

Present from the start of the season with an early spring peak of 503 on 4th April. 338 breeding pairs were recorded, a return to more typical numbers after the low count of 298 in 2012. Wet weather in spring and June took its toll, with many smaller chicks succumbing in the larger colonies. The species was recorded daily until the end of the season with up to 200 birds present into September. Numbers dropped off slightly in October and early November until 210 were counted roosting near South Harbour on 9th November

Great Black-backed Gull *Larus marinus*

Juan Mooar

Present throughout the season. The spring peak count of 102 birds on 3rd May involved a group of 65 in the Sea Field during rough weather. A total of 46 breeding pairs were located, with breeding success much improved compared to 2012. From 25 monitored nests, 14 young were raised to fledging. The peak autumn count was 150 on 27th October.

Sandwich Tern *Sterna sandvicensis*

Two north past Cow Harbour on 23rd May and two south past Culbery on 12th July were the only records.

Guillemot *Uria aalge*

Common Murre

Stronnag/Chennell

Present from early March, with birds seen back on breeding ledges from mid-March onwards. A total of 194 adults were counted on breeding ledges in June; 55 in Ghaw Yiarn and 139 at Big Head (on the boat-based survey). Breeding birds had mostly dispersed by mid-July, with only very occasional sightings of a handful of birds thereafter. One on 24th September was the final record.

Razorbill *Alca torda*

Coltrag

First seen at the start of March with breeding numbers building gradually up to mid-May. The boat-based survey on 19th June yielded a count of 226 adults at suitable breeding sites. Breeding success was mixed. The highest productivity was recorded at Gibdale, but the Burroo Neck colony suffered from a high degree of predation (see the 'Notes on Breeding Seabirds' section for further details). Sightings dropped off quickly after July, with only two further sightings before the final record on 22nd September.

[Large Auk sp.] Guillemots and Razorbills too distant for specific identification were regularly recorded on seawatches with a peak spring count of 174 off Cow Harbour on

3rd May. There were no large counts in autumn, with a maximum of 116 on 23rd October, reflecting a generally poor season for seawatching.

Black Guillemot *Cephus grille*

Caillagh Ghoo

Five on the sea below the lighthouses on 23rd February were the first of the year. Sightings were then more or less daily through to the end of June. Pairs were present off Cow Harbour and in Gibdale with a group of eight also regularly seen beneath the lighthouses. In late May, one of the Gibdale pair was seen flying into a hole in the rocks on Gibdale Point, whilst the other bird sat close by calling. Unfortunately, this area was not accessible so could not be checked and despite further watches, no subsequent breeding activity was recorded.

Puffin *Fratercula arctica*

Pibbin/Poltag

Another very quiet year, with the first two birds seen flying north past Culbery on 24th May. Up to three birds were seen on the sea off Baie yn Ooig during June and July, and one in the Puddle but there was no evidence of any breeding activity. There were no autumn records.

Atlantic Puffin

Stock Dove *Columba oenas*

Two records; on 9th April one flew into a cluster of spruce trees near the Observatory and on 26th May, a bird flew north over the Observatory and the Back Field.

Woodpigeon *Columba palumbus*

Calman keylley

A freshly dead bird found on 22nd February was the first record of the year. From 6th March, one was seen almost daily in the central glen until 26th, when it was found dead in the Top Withy having been killed by a raptor. Up to two birds were then seen sporadically throughout May and June. Records tailed off in July with the next sighting (of a single bird) on 4th November. The only movement during the year concerned a flock of 225 flying west high above the Observatory on 8th November, most of which took cover in the bushes around the Observatory to avoid two hunting Peregrines. Nine Woodpigeons were also seen the following day.

Common Wood Pigeon

Collared Dove *Streptopelia decaocto*

First seen on 26th February with the next record not until 8th May. Up to two were seen regularly for the rest of the month. On 2nd June, a group of seven flew from the Sycamores behind the tractor shed. After two birds seen on 4th June, all the remaining records were of single birds, with the final sighting on 20th July.

Eurasian Collared Dove

Cuckoo *Cuculus canorus*

Cooag

Three on 25th May were the first of the year occurring as part of a good arrival of grounded migrants when a band of heavy rain moved through at dawn. One was still present on 26th. Singles seen and heard singing on 7th June and 19th and 20th July were the only other records.

Common Cuckoo

Short-eared Owl *Asio flammeus*

After the excellent series of sightings in 2012, this year was a major disappointment with only two confirmed records; one was flushed from the heather near the Mill Pond during a breeding bird survey on 25th May and one was seen flying over Cow Harbour late in the evening on 17th June. An 'eared owl' sp seen just after midnight hunting near South Harbour on 15th June was probably also this species.

Annual bird-day totals of Short-eared Owls, 2004-2013

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird-days	7	10	2	4	3	28	1	6	12	2

Repeated sightings of the successful breeding pair in 2009 explain the high number of bird-days that year.

Swift *Apus apus*

One that flew north up the glen on 25th April was the first record. Between 19th May and 9th June there were then seven sightings of up to six birds, usually passing high overhead. Up to ten birds were recorded on four dates in July and the final sighting of two birds occurred on 1st August.

Chough *Pyrrhocorax pyrrhocorax***Red-billed Chough**

Caaig

A total of 10 pairs bred fledging at least 16 young. Seven nests were monitored, with egg laying generally occurring two to three weeks later than 2012, presumably due to the cold and wet conditions in the early part of the spring. Two nests failed completely at the egg stage, but all young fledged from the remaining five nests.

Wandering birds from the mainland joined those resident on the Calf on several occasions during the breeding season. The peak spring count of 35 on 14th May involved a flock of 24 birds. From 22nd August a large flock was present in the Front Field exploiting what appeared to be excellent feeding opportunities and giving fantastic views. Day counts exceeded 60 birds on six dates with a peak of 67 on 5th September. The confiding nature of the group allowed several colour rings to be read, with two young birds from across the Sound recorded, along with one bird ringed as a chick on the Calf in 2012. In October, a maximum of 41 were seen on 3rd after which numbers gradually decreased. Up to ten birds were seen daily in November.

Magpie *Pica pica***Black-billed Magpie**

Pieanat/Piannad

Singles on 18th and 28th March and 6th May were the only spring records. A small influx occurred in October with up to seven seen on eight days between 8th and 19th.

Jackdaw *Corvus monedula***Western Jackdaw**

Caaig/Juan teayst

Four spring records occurred between 16th May and 8th June, with a peak of nine (seen flying east over the Observatory) on the final date. In autumn, up to seven were seen on six dates between 8th September and 31st October.

Rook *Corvus frugilegus*

Trogh

One on 17th April and two on 10th May were the only sightings in the first half of the year. Four on 7th September were followed by an excellent count of 23 the following day (seen feeding in the Sea Field in a mixed flock with Jackdaws). There were three further records of up to 12 birds in September and in October, three were recorded on 10th and eight on 24th; a good series of sightings after a blank autumn in 2012.

Carrion Crow *Corvus corone*

Single birds were seen on nine dates between 13th March and 22nd May. One on 8th August was the first of the autumn but the species did not become regular until mid-September. Up to four were seen in October, with the final record occurring on 25th.

Hooded Crow *Corvus cornix*

Fannag Ghlass

Present throughout the year. In spring the peak count was 24 on 29th March. At least five pairs bred successfully. No large influxes were recorded during the autumn, with the peak count of 22 occurring on 3rd October.

Hybrid Carrion x Hooded Crow

Hybrids were seen regularly in ones and twos throughout the year. A pair made up of a hybrid bird and a pure looking Hooded Crow nested in Mill Giau, but the nest was predated during the egg stage.

Raven *Corvus corax*

Common Raven

Feeagh/Feeagh Vooar

Two pairs bred; one in Ghaw Yarn (fledging three young from a clutch of six eggs) and one on Amulty (fledging a single chick). Counts of seven on 30th March and 18th April involved presumed migrants or wandering birds. Nine on 25th August was the peak daily count.

Goldcrest *Regulus regulus*

Ushag y fuygh

Present in low numbers from the start of the season with passage picking up in early March, when 29 were recorded on 7th March. 35 on 12th April was the peak spring count and 27 were recorded the following day. Numbers started to tail off after mid-April with mainly single figure counts in the second half of the month. A small influx of 22 occurred on 1st May, with numbers decreasing daily until 9th, followed by a gap in sightings before the final two of the spring on 25th. Return passage began with a single bird on 15th August, after which sightings were almost daily until the end of the season. Numbers were very low with no large falls and double figure counts were made on only fourteen dates between 26th September and 1st November.

Monthly bird-day totals and peak counts of Goldcrests

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	7	109	248	62	0	0	19	117	215	53
Max count	1	12	35	22	0	0	4	13	21	11

Spring and autumn bird-day totals and peak counts of Goldcrests since 2005

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Spring Bird-days	783	24	427	636	191	79	211	898	419
Max count	120	9	40	200	35	6	20	45	35
Autumn Bird-days	2033	840	795	1144	88	460	931	1135	404
Max count	150	45	80	100	10	40	40	52	21

For the purpose of the table above, spring is defined as March to June and autumn as August to November. Note that observer coverage in spring 2006 was incomplete with no observations before 26th April, missing the peak Goldcrest passage. Although coverage during March and November has been inconsistent over the last nine years (due to annual variation in start and end dates to the Warden's contract) the table illustrates just how poor autumn 2013 was for Goldcrests.

Blue Tit *Cyanistes caeruleus*

Drean Gorrym

A quiet spring with only three records; one on 5th March, two on 3rd April and one on 6th April. In autumn, there were only eight records of either one or two birds between 21st September and 19th October.

Great Tit *Parus major*

Drean Mooar

A single bird was recorded most days from February 18th and was joined by a second on March 5th. Up to two were then recorded intermittently over the rest of the month until four were seen on 30th. Up to five were present in April, with a single bird on 27th, the final record of the spring. The first of the autumn arrived on September 23rd and sightings were then almost daily through to the end of the season. 13 on 12th and 11 on 13th were the only double-figure counts.

Coal Tit *Periparus ater*

There were six records in spring involving either one or two birds between 24th March and 2nd May. In autumn, up to four were seen regularly from 12th October through to the end of the season.

Skylark *Alauda arvensis*

Ushag Tappagh/Ushag y Tappee/Ushag Happagh/Ushag Cabbagh

In spring, six singles were recorded between 5th March and 8th April, with an additional three birds seen on 10th March. Autumn passage began with a single on 25th August and continued through to the end of the season, but sightings did not become regular until late September. The peak day total was 147 on 24th October, with double-figure counts recorded on an additional four days.

Sand Martin *Riparia riparia*

Gollan Geinne

There were seven spring records between 19th April and 26th June, involving either one or two birds. Two on 19th August were followed by a single five days later and another bird on 5th September.

Swallow *Hirundo rustica*

Barn Swallow

Gollan geayee

One on 12th April was followed by a trickle of birds for the rest month, but passage picked up in May. 128 on 7th was the first of three double-figure day counts with 105 also seen on 19th and 118 on 20th. Only three pairs bred; one in the Observatory buildings, one at Jane's House and one beneath the Mill Bridge. The Observatory and Mill pairs were both double brooded and a total of 18 young fledged from the five breeding attempts. Autumn numbers peaked in late August with 122 recorded on 25th. Up to 80 were seen daily in September but one on 10th and 11 on 24th were the only October records.

Monthly bird-day totals and peak counts of Swallows

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	0	113	1051	465	314	760	593	12	0
Max count	0	29	128	50	18	122	80	11	0

House Martin *Delichon urbicum*

Common House Martin

Gollan Thie

The first on 19th April was followed by another single ten days later. Passage during May was steady with up to 39 birds recorded on eighteen days. Smaller numbers were seen during most of June with the final spring record occurring on 27th. After two on 19th July, there were four records of up to six birds in August. Passage occurred on only four dates in September, with a peak count of 50 on 22nd. 10 on 24th were the last birds of the year.

Long-tailed Tit *Aegithalos caudatus*

Caillagh Veg yn Arbyl

An extremely quiet year with two birds in the back garden on 27th September constituting the sole record.

Yellow-browed Warbler *Phylloscopus inornatus*

One spent most of the morning of 30th September in the front hedge from where it called persistently but proved difficult to see well.

Chiffchaff *Phylloscopus collybita*

Common Chiffchaff

Beealerey

Spring passage began on 11th March after which small numbers were seen regularly until 22nd. There was a gap in sightings until April 7th. Numbers were extremely low with 15 on 2nd May, the only double-figure count. The first juvenile arrived on 7th July with up to two birds then seen to the 18th. The next record on 29th August heralded the start of the main autumn passage, although numbers were generally low. The peak count of 46 was made on 27th September but no other daily total exceeded 15 birds. Sightings were regular right through to the final day of the season.

Monthly bird-day totals and peak counts of Chiffchaffs

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	11	79	64	36	8	14	169	87	12
Max count	2	9	16	5	2	5	46	10	2

Willow Warbler *Phylloscopus trochilus*

Drean vane

A single on 12th April was the first and was followed by daily sightings for the rest of the spring. The last fortnight of April saw the busiest passage with a peak count of 54 on 24th. Small influxes continued to occur in May with 34 on 1st and 31 on 19th. Numbers petered out towards the end of the month with just a trickle of birds recorded in June. The first juvenile was recorded on 7th July but the bulk of the autumn passage began after the first week of August. Numbers remained low, however, with a maximum of only 30 on 7th and 8th. Two on 27th September were the final records.

Monthly bird-days and peak counts of Willow Warblers

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	109	230	190	29	50	217	55	0	0
Max count	12	55	34	7	5	30	10	0	0

Blackcap *Sylvia atricapilla*

Eurasian Blackcap

Bayrn dhoo

A good spring began with a male in the front hedge on 3rd April and another single four days later. A daily turnover of birds began on 15th April and ran until mid-May with an excellent peak count of 51 on 25th April, accompanied by five other double-figure counts. A trickle of birds passed through until 7th June, with a break in sightings before the first juvenile exactly a month later (which was still present on 8th). Autumn passage was extremely poor, however, with only four records of nine birds in September, one or two birds seen on eight dates in October and two singles in November.

Monthly bird-days and peak counts of Blackcaps

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	0	153	103	6	3	2	9	10	2
Max count	0	51	24	2	1	1	6	2	1

Garden Warbler *Sylvia borin*

Kiaulleyder garee

Two birds were caught and ringed at the Observatory on 17th May and an unringed bird was seen on 20th. There were no autumn records.

Whitethroat *Sylvia communis*

Common Whitethroat

Fynnag ny Keylley

The first on 25th April was followed by ones and twos until a small influx in the third week of May. This peaked at 16 birds on 19th. Two pairs bred successfully in the Withy area. Autumn passage was light with no counts exceeding single figures. Up to nine were recorded regularly in August and up to two were seen on three dates in September, with the final sighting on 25th.

Grasshopper Warbler *Locustella naevia***Common Grasshopper Warbler**

All records occurred in spring, with up to two seen or heard on five dates between 21st April and May.

Sedge Warbler *Acrocephalus schoenobaenus*

Spring passage occurred between 21st April and 10th June. May saw a regular daily turnover of birds with a maximum of 15 on 19th. Autumn was extremely poor with only five singles recorded between 11th July and 8th August.

Treecreeper *Certhia familiaris***Eurasian Treecreeper**

Snaueyder

A single was ringed at the Observatory on 8th July and remained in the sycamores in the back garden until 11th.

Wren *Troglodytes troglodytes***Winter Wren**

Drean

Recorded throughout the year, a total of 42 territories were recorded, spread throughout the island. 24 of these were from multiple registrations. This was another significant increase on the total of previous years (24 in 2012 and five in 2011).

Starling *Sturnus vulgaris***Common Starling**

Truitlag

Regularly seen from 1st March, though numbers reached a peak of just 10 birds (on 30th March) during the spring. Post-breeding flocks passed through during June (the first juvenile was noted on 10th) with a count of 41 made on 27th. Numbers dwindled in July and records were then only occasional until the peak autumn migration got underway in mid-October. High numbers were seen through to the end of the season with six triple-figure counts, reaching a maximum of 270 on 8th November.

Rose-coloured Starling *Pastor roseus*

A confiding individual was first seen by the main gate into the Withy on 8th June and remained in the area until 16th, favouring a small patch of grass in the north-west corner of the Lower Withy Field. The bird was either an adult female or a second-year male and was the third Calf record after an adult on 13th June 2006 and a first winter on 15th October 2004.

Ring Ouzel *Turdus torquatus*

For the first time since 2006 there were no spring records. All autumn records occurred in October, with a total of 11 recorded on nine dates between 2nd and 26th.

Blackbird *Turdus merula***Common Blackbird**

Lhondhoo

Up to six over-wintering individuals were present in February. Passage birds began to arrive from early March with most days then seeing a turnover of up to 24 birds. The peak spring count of 31 was made on 3rd April. Three pairs bred; two at the Observatory (both of which were at least double-brooded) and one at the Withy. Autumn migrants started to arrive from the first week of October, after which double-figure totals were recorded daily

through to the end of the season. 65 on 25th October was the highest count, with 60 also recorded on 5th December. The relatively early finish to the season meant part of the late autumn passage was missed.

Monthly bird-days and peak counts of Blackbirds

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	27	284	217	125	197	143	107	101	351	181
Max count	6	24	31	8	11	8	9	7	65	60

Fieldfare *Turdus pilaris*

Ushag sniaghtey

One on 16th March was followed by another single on the 17th. None were then seen until three on 6th April. An excellent 107 passed through during the morning on 12th April (along with good numbers of other thrushes) and 32 were recorded the following day (the last of the spring). One on 10th October was the first of the autumn but passage remained light with only up to eight birds recorded on a further ten dates through to 5th November.

Song Thrush *Turdus philomelos*

Lhon/Thresh len

After a maximum of five in February, a few small influxes were noted in March with counts of 12 on 10th, 21 on 12th and 11 on 17th. Small numbers were then seen daily until mid-May. A male arrived at the Observatory in mid-June and was heard singing for the remainder of the month. Breeding was confirmed when a very recently fledged juvenile was trapped in the back garden on 30th July. This was the first confirmed breeding since 1970. After daily records of up to eight birds in August and September, passage picked up in early October. Double-figure counts were made on most days until the end of the season, with high counts of 50 on October 25th and 45 on 5th November.

Monthly bird-days and peak counts of Song Thrushes

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	25	160	58	1	11	37	24	78	363	186
Max count	5	21	10	1	2	3	3	8	50	45

Redwing *Turdus iliacus*

Lhon Geayee

Spring numbers were low until early April when four small influxes between 6th and 13th reached a peak count of 36 on 12th. A single on 4th October heralded the start of a good autumn passage with a maximum of 150 on 10th, followed by thirteen double-figure daily totals.

Mistle Thrush *Turdus viscivorus*

Lhon Keylley

Two on 16th March and singles the next day and on 17th and 18th May were the only records in the first half of the year. After a single on 12th July the next record did not come until 11th October. Eight singles through to 4th November were followed by a flock of seven outside the Observatory on 6th November.

Spotted Flycatcher *Muscicapa striata*

Skybbyltagh breck

The first was in the back garden on 8th May, with the main passage period starting ten days later and running until 9th June. The only double-figure counts were 13 on 19th and 11 on 20th May. Three on 17th and one on 25th June were the remaining spring records. Autumn was quiet with up to three seen between 16th August and 14th October.

Robin *Erithacus rubecula*

European Robin

Cleeen jiarg/Spittag

Seen daily from the start of the season until mid-April after which a trickle of singles followed until 1st June. There was no evidence of any breeding activity for the second year running. The first juvenile arrived on 7th July with the species then recorded daily through to the end of the season. Double-figure counts were made on eleven dates in September peaking at 37 on 27th. Numbers were low for October with a maximum of only 19 on 24th.

Monthly bird-days and peak counts of Robins

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	11	109	89	8	1	18	82	258	260	80
Max count	3	9	13	1	1	2	15	37	19	12

Pied Flycatcher *Ficedula hypoleuca*

A singing male in the back garden on 5th May was the first spring record since 2008. In August, singles were recorded on 18th, 27th and 28th. Sadly, this low annual total is typical of recent years:

Annual bird-day totals of Pied Flycatcher, 2005-2013

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird-days	1	17	2	4	1	1	0	6	4

Black Redstart *Phoenicurus ochruros*

A good spring saw singles on six dates between 5th April and 2nd May and two on 29th April. There were no autumn records for the first time 2008.

Redstart *Phoenicurus phoenicurus*

Common Redstart

After a great spring in 2012 (30 bird days), only six singles were recorded between April 19th and June 5th. A complete lack of autumn birds capped an extremely poor year for this species.

Whinchat *Saxicola rubetra*

In spring, singles were recorded on five dates between 15th May and 3rd June. Autumn passage was also light, involving only singles birds on 18th, 27th and 28th August.

Stonechat *Saxicola torquata*

Eurasian Stonechat

Boid y chonnee/Kione dhoo y eeigyn

An over-wintering pair were joined by two males on 15th March. After the return of a breeding pair to the island late in 2012, the slow re-colonisation continued with two breeding territories maintained; one in the Lighthouse Fields and the other to the north-east of the Observatory. Both pairs were triple-brooded.

Post-breeding dispersal accounted for counts of up to 14 in July and 17 in August. Numbers trickled off in September with single figure counts then made most days until the end of the season.

Monthly bird-days and peak counts of Stonechats

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	5	19	10	64	167	199	194	109	35	19
Max count	2	4	2	7	10	14	17	9	7	5

Wheatear *Oenanthe oenanthe*

Northern Wheatear

Claggan cloaie

A male at Fold Point on the relatively late date of 29th March was the first of the year. Daily sightings followed with peak numbers in the last week of April and first week of May consisting mainly of birds of the Greenland race *O. o. leucorhoa*. 13 territories were recorded (eight of which were from multiple registrations). Productivity on the Calf (and presumably elsewhere) was excellent with a steady stream of juveniles passing through during July and August, with high counts of 36 and 31 on 7th and 29th July respectively and 40 on 8th August. Counts remained in single figures during September and October with no great influxes of Greenland race birds. Passage was prolonged, however, with the last sighting on 25th October.

Monthly bird-days and peak counts of Wheatears

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	0	1	319	549	345	572	333	51	12	0
Max count	0	1	51	55	20	36	40	8	2	0

Dunnock *Prunella modularis*

European Pied Flycatcher

Drean mollagh/Bogh Keeir

Present in small numbers from the beginning of the season, with up to six seen most days until 2nd May. A single on 25th September was the first autumn bird, after which sightings were daily through to the end of the season. Peak numbers were present in October with counts of 10 on 11th and 15th.

Monthly bird-days and peak counts of Dunnocks

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
Bird-days	7	46	51	2	0	0	0	8	99	34
Max count	3	6	6	1	0	0	0	6	109	6

House Sparrow *Passer domesticus*

Jallyn

A juvenile ringed at the Observatory on 7th July was the first record, with no others appearing in the first half of the year. A small influx occurred in mid-October, with two recorded on 11th, one on 13th and three on 15th. Annual totals since 2005 have shown quite a variation:

Annual bird-day totals of House Sparrow, 2005-2013

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird-days	3	14	17	16	2	32	26	3	7

Tree Sparrow *Passer montanus***Eurasian Tree Sparrow**

A single bird seen in the front hedge on 11th June was the only record. Although the species has never been abundant, as with House Sparrows, recent annual totals have been highly variable:

Annual bird-day totals of Tree Sparrow, 2005-2013

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird-days	46	5	22	0	14	6	30	3	1

Yellow Wagtail *Motacilla flava*

One flew over the front field on 23rd August.

Grey Wagtail *Motacilla cinerea*

In the first half of the year, single birds flying over were noted on 19th March, 4th April, 22nd May and 10th June. Single birds on 15th and 17th July were followed by a gap in sightings until the main period of passage began on 24th August. Up to nine birds were seen on 26 dates until 1st November, with most records occurring during September.

White/Pied Wagtail *Motacilla alba alba/yarrellii**Ushag Vreck/Ushag Voltee*

Pied Wagtails *M. a. yarrelli* were seen daily from 5th March. There was little evidence of any spring passage and three pairs bred successfully; at the Observatory, the Smithy and near South Harbour. Autumn passage began during the second week of August, though peak numbers occurred during the final week of the month. Most birds were recorded as *alba* Wagtails and not specifically assigned to race due to the high number of flyover records. The maximum count of 110 *alba* Wagtails, plus 10 confirmed White Wagtails, was made on 28th August. A light passage continued through September, reaching a maximum of 34 birds on 25th (26 Pied and eight *alba*). Birds present in October were almost entirely Pied Wagtails, with a maximum of 13 on 24th. Singles were recorded on three dates in November.

Tree Pipit *Anthus trivialis*

One trapped and ringed at the Observatory on 28th April was followed by one and three on 16th and 17th May respectively, and one on 17th June. Return passage was strong with up to eight birds recorded on 18 dates between 13th August and 24th September. One of the best years in recent times:

Spring and autumn bird-day totals and peak counts of Tree Pipits since 2005

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Spring Bird-days	4	1	7	15	1	3	14	6	6
Max count	1	1	2	3	1	1	3	1	3
Autumn Bird-days	39	15	11	17	0	1	39	15	46
Max count	9	6	2	5	0	1	8	3	8

Meadow Pipit *Anthus pratensis*

Tweet/Cheet/Ushag y Veet

Recorded from the start of the season with spring numbers reaching a peak of 109 on 17th March. 56 territories were mapped (25 from multiple registrations) spread well across the island. Numbers remained fairly steady until southbound passage began to get underway in mid-August. Fourteen triple-figure counts were made before the end of September, with a maximum of 510 on September 25th. Numbers remained in double figure counts on most days through to the end of the season.

Monthly bird-days and peak counts of Meadow Pipits

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	32	691	1722	1124	980	1095	1911	2694	553	77
Max count	10	109	104	60	45	86	150	510	80	18

Rock Pipit *Anthus petrosus*

Eurasian Rock Pipit

Fushag Varrey

Present throughout the year with a total of 36 territories mapped around the coastline (24 from multiple registrations). Post-breeding aggregations (peaking at 28 birds) were seen around Cow Harbour and the Puddle in early autumn.



Rock Pipit (colour ringed) Photo: Will Hayward

Chaffinch *Fringilla coelebs*

Ushag y Choan/Ushag veg vreck

First seen on 19th February, with daily records from the start of March. Numbers remained low during the spring reaching a maximum of only 15 on 13th April. Three pairs bred; two at the Observatory and one near the Top Withy. Small numbers were seen each day up to the beginning of October when the main autumn migration began. 104 on 10th was the only

triple-figure count but most other days saw numbers in double figures until the end of the season.

Monthly Bird-days and peak counts of Chaffinches

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	5	89	211	137	155	157	68	95	702	327
Max count	3	7	15	11	12	10	5	9	104	80

Brambling *Fringilla montifringilla*

A total of nine were recorded on six dates between 5th and 15th April. Only present on four dates in the autumn, with singles on 12th and 26th October and 5th November. Three were recorded on October 24th.

Annual bird-day totals of Bramblings, 2005-2013

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird-days	30	11	41	16	0	14	25	34	15

Greenfinch *Carduelis chloris*

European Greenfinch

Corkan Keylley Glass

Another very poor year for the species with low numbers in both spring and autumn.

Recorded regularly from 15th March with maximum daily counts of one in March, three in April and five in May. One pair bred at the Observatory for the first time since 2010. Counts remained in single figures into October when a couple of small influxes occurred; 17 on 10th, 11 on 15th and 15 on 23rd. Four on 9th November were the last of the season.

Monthly bird-days and peak counts of Greenfinches

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	0	3	21	26	15	69	11	5	69	4
Max count	0	1	3	5	2	8	2	2	17	4

Annual bird-day totals of Greenfinches, 2005-2013

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird-days	3049	2159	1640	1929	970	482	1483	243	223

The table above illustrates the sharp decline in numbers of Greenfinches passing through the Calf since 2005.

Goldfinch *Carduelis carduelis*

European Greenfinch

Lossey ny Keylley / Kiark my Leydee

After the first three on 17th February good numbers were recorded during the spring with most arriving from mid-April onwards. 90 on 2nd May was the maximum with other good counts including 60 on 24th and 59 on 29th April. Only one pair bred this year, successfully fledging at least three young from a nest in the front hedge. Good post-breeding numbers built up from the second week of July reaching 63 by 27th. Numbers dwindled in August but new birds began to arrive towards the end of September. Up to 43 were then seen daily through to the end of the season.

Monthly Bird-days and peak counts of Goldfinches

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	6	138	604	549	242	768	340	179	286	144
Max count	3	22	60	90	23	63	32	31	43	40

Siskin *Carduelis spinus*

Eurasian Siskin

Small numbers were recorded fairly regularly from 19th February. All counts in the first half of the year were of single figures. April and May had the most records, with 34 and 32 bird days respectively. Sightings were very occasional in July and August with small numbers starting to arrive following a count of 10 on 12th September. Birds were then recorded on 14 days through to 17th October. Peak counts were 17 and 11 on 25th and 28th September respectively, and 20 on 13th October. Four on 1st November was the final record.

Linnet *Carduelis cannabina*

Common Linnet

Fillip ny Kempey/Ushag y lieen

The first three were noted on 30th March, after which the species was recorded almost daily until the end of the season. Numbers in April and May were pretty low with no counts exceeding 20 birds. Breeding was centred around the Withy area and Mill Giau with an estimated 15 birds present. Post-breeding flocks built up at the end of the summer reaching a maximum of 73 birds on August 16th. Numbers were low in September with a peak of 28 on 27th. After 37 on 3rd October, records tailed off with the last eight seen on 5th November.

Monthly bird-days and peak counts of Linnets

Month	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Bird-days	0	3	120	316	471	659	783	164	100	39
Max count	0	43	17	20	26	55	74	28	37	17

Lesser Redpoll *Carduelis cabaret*

Bytermyn Dhone/Lossan Ruy

After up to three were seen on three dates between 15th March and 13th April, passage became regular from April 20th. Most days in May saw double-figure totals with a peak of 25 on 17th. 18 on 2nd June was the highest count of the month with no further records after two on 10th. July, August and September saw five, three and three records respectively. Autumn passage during October was sporadic, with records on seven dates from 10th, including a peak of 60 on 24th. A single on 9th November was the final record.

Crossbill *Loxia curvirostris*

Single females were seen on 1st May, and 1st and 4th June around the Observatory. A flyover was also recorded on 17th July.

Common Rosefinch *Carpodacus erythrurus*

A stunning red male was mist-netted early in the morning of 26th May at the Observatory and was heard singing from the back garden later that day. This was the 27th Calf record, sixteen of which have occurred in the spring (all between 20th May and 22nd June).

Reed Bunting *Emberiza schoeniclus*

Common Reed Bunting

Pompee ny Guirtlagh

A quiet spring with the first record not coming until 11th April. Up to three were then seen on and off until 26th May. One heard in Big Park on 24th July was the next record but there was no evidence of any breeding attempt. Autumn was also very slow with only three singles in August, two singles in September, up to two birds on five dates in October and three singles in November.

Ringling Report

3109 birds of 57 species were ringed on the Calf in 2013, a figure which is well down on the totals for the past two years (5012 in 2012 and 6477 in 2011) and also below the mean total over the last ten years (3834). Poor weather during the main spring and autumn migration periods was mostly to blame, with frequent strong winds and heavy rain severely limiting mist-netting opportunities. Despite unhelpful conditions early on in the breeding season, 486 pulli were ringed, largely due to a rare spell of settled warm and sunny weather in June and July. Shags and Herring Gulls comprised the majority of this total (163 and 190 respectively) and the 23 Manx Shearwater chicks ringed was a new annual record. From late summer onwards the crow traps were in regular use and proved effective during Meadow Pipit, Wheatear and *alba* Wagtail passage. Along with the two Heligoland traps, they accounted for over a quarter of all fully-grown new bird captures.

No new species were ringed in 2013 but a few scarcely trapped species featured on the ringing list. These included the Calf's second Carrion Crow (caught in a cage trap at the Withy during October), fourteenth Common Rosefinch (a fine red male mist-netted in the back garden in May) and twenty-fifth Curlew (dazzled in Sea Field in November). The first Skylark ringed since 2001 is also worthy of special mention. The tape luring of Meadow Pipits was again a key feature of the autumn's ringing and resulted in a good annual total of 446. Call playback was also a major factor in the capture of 241 Goldfinches, 94 Lesser Redpolls, 10 Tree Pipits (a significant number as only six were ringed in the previous 10 years) and 8 Grey Wagtails. The use of spring traps in April and May and an excellent influx of dispersing juveniles in July and August resulted in a strong annual total for Wheatears (141). With the discovery of new breeding sites for Manx Shearwaters, extra effort was put in to ensure a sample of adults and chicks were ringed at each colony and a decent total of 57 birds was achieved.

The total of 21 Choughs was the second highest on record (after 22 in 2011) and involved the colour-ringing of 19 birds (15 pulli and four adults) for the Manx Chough Project. The Manx Ringing Group's colour-ringing project on large gulls was again supported with 53 Herring Gull, 17 Great Black-backed Gull and six Lesser Black-backed Gull chicks receiving black darvic rings with a four-digit yellow code. Many thanks to visiting ringers Kev Scott, Sean Gray and Mark Fitzpatrick for their efforts and support this year. Dan Reynoldson, Andrew Godden, Alice Dickson and Hannah Mitchell provided invaluable assistance with various aspects of the ringing programme. Thanks also to Allen Moore and Chris Honan for sending through information on sightings of colour-ringed birds.

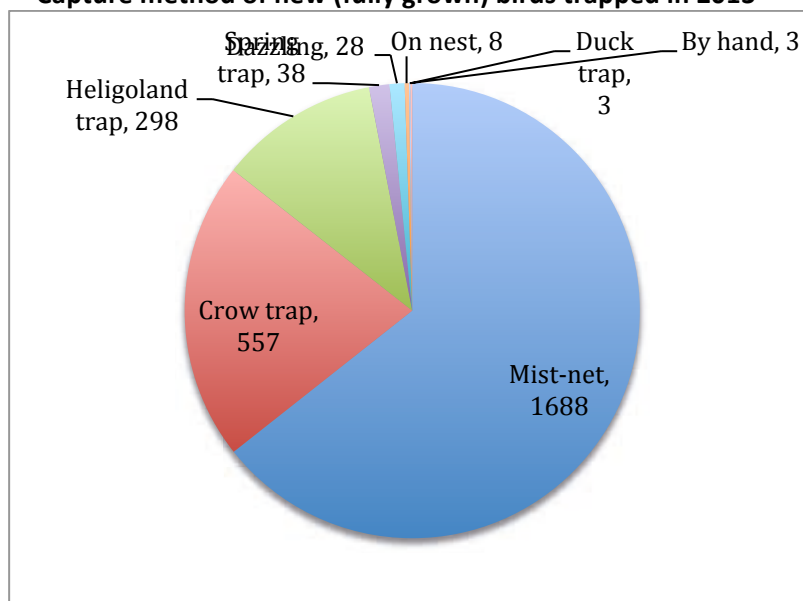
Monthly Ringing Totals

March	112
April	447
May	467
June	349
July	437
August	461
September	472
October	306
November	58
Grand Total	3109

Top Ten Species

1 st	Meadow Pipit	446
2 nd	Willow Warbler	276
3 rd	Goldfinch	241
4 th	Herring Gull	190
5 th	Goldcrest	175
6 th	Blackbird	167
7 th	Shag	163
8 th	Wheatear	141
9 th	Chiffchaff	133
10 th	Robin	124

Capture method of new (fully grown) birds trapped in 2013



Original ringing year of species re-trapped or re-sighted in 2013

	12	11	10		09	08	07	06	05	04	03	02	01	00	95
Eider		1	2		2									1	
Manx Shearwater	1	1				2	1		3	1	1				
Shag						1	1							1	1
Herring Gull													1		
Razorbill									1		1				
Swallow							1								
Meadow Pipit	5	1													
Wren	5	1													
Dunnock	3														
Robin	4														
Stonechat	1														
Wheatear		1													
Blackbird	6		1												
Whitethroat	1														
Great Tit	1														
Chough	1														
Crow (Hooded Crow x Carrion Crow hybrid)												1			
Chaffinch	4		3												
Greenfinch		3	1												
Goldfinch	4	4			1										
Reed Bunting		1			1										

In addition, a freshly dead Shag was found near South Harbour in June, having been originally ringed as a chick in the Halby colony in 2010. A ring from a Herring Gull chick ringed in 1979 at Cow Harbour was also picked up, though it may have been lying undiscovered for some time.

2013 Ringing Totals

Species	Ringed 2013			Grand Total	Recoveries	
	Juv/Adult	Pulli	Total		2013	1959-2013
White-fronted Goose	.	.	.	1	.	0
Pink-footed Goose	.	.	.	1	.	0
Brent Goose	.	.	.	1	.	0
Teal	.	.	.	4	.	0
Mallard	.	.	.	21	.	4
Eider	3	.	3	28	.	0
Goldeneye	.	.	.	1	.	0
Fulmar	1	2	3	136	.	3
Manx Shearwater	34	23	57	707	1	21
Storm Petrel	33	.	33	5124	6	546
Gannet	.	.	.	1	.	0
Cormorant	.	.	.	7	.	3
Shag	2	161	163	7482	9	560
Hen Harrier	.	.	.	50	.	3
Sparrowhawk	8	.	8	197	.	15
Kestrel	.	.	.	139	.	10
Merlin	.	.	.	35	.	1
Peregrine	.	.	.	9	.	0
Grey Partridge	.	.	.	14	.	0
Water Rail	.	.	.	37	.	0
Corncrake	.	.	.	7	.	0
Moorhen	.	.	.	38	.	0
Coot	.	.	.	1	.	0
Oystercatcher	.	9	9	291	.	5
Ringed Plover	.	.	.	1	.	0
Lapwing	.	.	.	27	.	2
Purple Sandpiper	.	.	.	32	.	1
Dunlin	.	.	.	1	.	0
Jack Snipe	.	.	.	12	.	0
Snipe	.	.	.	34	.	1
Woodcock	.	.	.	21	.	1
Whimbrel	.	.	.	1	.	0
Curlew	1	.	1	25	.	0
Redshank	.	.	.	21	.	0
Greenshank	.	.	.	1	.	0
Green Sandpiper	.	.	.	1	.	0
Common Sandpiper	.	.	.	4	.	0
Turnstone	.	.	.	36	.	0
Common Gull	.	.	.	1	.	0
Lesser Black-backed Gull	.	12	12	362	5	12
Herring Gull	.	190	190	13726	13	459
Great Black-backed Gull	.	24	24	2583	2	135
Kittiwake	.	.	.	939	.	22
Guillemot	.	.	.	618	.	31

Species	Ringed 2013			Grand Total	Recoveries	
	Juv/Adult	Pulli	Total		2013	1959-2013
Puffin	.	.	.	7	.	0
Stock Dove	.	.	.	2	.	0
Woodpigeon	.	.	.	27	.	2
Collared Dove	.	.	.	46	.	0
Turtle Dove	.	.	.	15	.	2
Mourning Dove	.	.	.	1	.	1
Cuckoo	.	.	.	113	.	1
Scops Owl	.	.	.	1	.	1
Long-eared Owl	.	.	.	22	.	1
Short-eared Owl	.	.	.	62	.	1
Swift	.	.	.	1	.	0
Hoopoe	.	.	.	4	.	0
Wryneck	.	.	.	22	.	0
G. S. Woodpecker	.	.	.	5	.	0
Skylark	1	.	1	61	.	0
Sand Martin	.	.	.	50	.	0
Swallow	39	15	54	3605	.	39
House Martin	1	.	1	69	.	1
Tree Pipit	10	.	10	466	.	2
Meadow Pipit	446	.	446	14463	.	37
Rock Pipit	1	.	1	246	2	0
Yellow Wagtail	.	.	.	1	.	0
Grey Wagtail	8	.	8	386	.	2
Pied Wagtail	46	5	51	1230	.	3
Waxwing	.	.	.	1	.	0
Wren	42	.	42	3989	.	5
Dunnock	25	.	25	2154	.	11
Robin	124	.	124	8898	1	58
Thrush Nightingale	.	.	.	1	.	0
Nightingale	.	.	.	9	.	0
Bluethroat	.	.	.	9	.	0
Black Redstart	4	.	4	102	.	0
Redstart	6	.	6	1334	.	7
Whinchat	.	.	.	726	.	3
Stonechat	48	.	48	2398	.	9
Wheatear	141	.	141	3286	2	16
Ring Ouzel	1	.	1	299	.	4
Blackbird	161	6	167	16327	.	181
Fieldfare	3	.	3	253	.	0
Song Thrush	103	1	104	7674	.	48
Redwing	11	.	11	1584	.	2
Mistle Thrush	.	.	.	234	.	6
Grasshopper Warbler	1	.	1	393	.	0
Sedge Warbler	41	.	41	5202	.	18
Marsh Warbler	.	.	.	5	.	0
Great Reed Warbler	.	.	.	1	.	0

Species	Ringed 2013			Grand Total	Recoveries	
	Juv/Adult	Pulli	Total		2013	1959-2013
Reed Warbler	.	.	.	32	.	1
Icterine Warbler	.	.	.	13	.	0
Melodious Warbler	.	.	.	17	.	0
Blackcap	97	.	97	2697	.	3
Garden Warbler	2	.	2	640	.	4
Barred Warbler	.	.	.	27	.	0
Lesser Whitethroat	.	.	.	93	.	0
Whitethroat	40	.	40	6328	.	14
Subalpine Warbler	.	.	.	16	.	0
Sardinian Warbler	.	.	.	1	.	0
Greenish Warbler	.	.	.	7	.	0
Pallas's Warbler	.	.	.	2	.	0
Yellow-browed Warbler	.	.	.	34	.	0
Dusky Warbler	.	.	.	2	.	1
Western Bonelli's Warbler	.	.	.	3	.	0
Wood Warbler	.	.	.	74	.	2
Chiffchaff	133	.	133	9125	1	32
Willow Warbler	276	.	276	39250	.	69
Goldcrest	175	.	175	38326	2	130
Firecrest	.	.	.	60	.	1
Spotted Flycatcher	24	.	24	4190	.	19
Pied Flycatcher	.	.	.	349	.	2
Red-breasted Flycatcher	.	.	.	16	.	0
Long-tailed Tit	.	.	.	273	.	3
Coal Tit	5	.	5	462	.	5
Blue Tit	8	.	8	1852	.	43
Great Tit	23	.	23	1368	1	31
Treecreeper	1	.	1	62	.	0
Golden Oriole	.	.	.	5	.	0
Red-backed Shrike	.	.	.	10	.	0
Great Grey Shrike	.	.	.	3	.	0
Woodchat Shrike	.	.	.	3	.	0
Magpie	.	.	.	390	.	6
Chough	6	15	21	451	.	41
Jackdaw	.	.	.	20	.	1
Rook	.	.	.	7	.	0
Carrion Crow	1	.	1	2	.	0
Hooded Crow	2	.	2	101	.	2
Raven	.	.	.	5	.	0
Starling	10	.	10	1638	.	17
House Sparrow	4	.	4	185	.	1
Tree Sparrow	.	.	.	110	.	0
Chaffinch	87	4	91	9851	2	82
Brambling	.	.	.	45	.	0
Serin	.	.	.	1	.	0
Greenfinch	21	2	23	3324	2	68
Goldfinch	237	4	241	3299	3	16

Species	Ringed 2013			Grand Total	Recoveries	
	Juv/Adult	Pulli	Total		2013	1959-2013
Siskin	10	.	10	436	.	4
Twite	.	.	.	3	.	0
Lesser Redpoll	94	.	94	926	1	7
Common (Mealy) Redpoll	.	.	.	16	.	0
Crossbill	.	.	.	10	.	0
Common Rosefinch	1	.	1	14	.	0
Long-tailed Rosefinch	.	.	.	1	.	0
Bullfinch	.	.	.	5	.	0
Hawfinch	.	.	.	4	.	0
Yellow-rumped Warbler	.	.	.	1	.	0
Song Sparrow	.	.	.	1	.	0
Yellowhammer	.	.	.	13	.	0
Ortolan Bunting	.	.	.	1	.	0
Rustic Bunting	.	.	.	1	.	0
Little Bunting	.	.	.	2	.	0
Reed Bunting	1	.	1	792	.	2
Red-headed Bunting	.	.	.	3	.	0
Northern Oriole	.	.	.	1	.	0
TOTAL	2623	486	3109	239373	54	2947

Recoveries and Controls

2013 provided a good variety of ringing recoveries and controls. Foreign captures included a Blackbird from Germany, a Sedge Warbler from France and Goldfinches from France and Belgium. The colour-ringing of gull chicks continued to yield interesting recoveries, with highlights including Lesser Black-backs reported from Spain, Portugal and Ireland and an excellent batch of local Herring Gull sightings. Other notable records included a good series of finch recoveries from across Britain and a Chiffchaff to Ireland. Two Wheatear recoveries were also a good reward for an increased effort spent on this species over the past couple of years.

Details of several outstanding captures from previous years were also received, including the original ringing information of a Danish Chaffinch control and a Dutch Blackbird control, along with news of a Storm Petrel found in France.

Manx Shearwater

FB19419	3	28/08/2005	Bardsey Island, Gwynedd		
	R	14/05/2013	Calf of Man	44km N	7 yrs 259 days

Storm Petrel

2487584	4	26/07/1999	Calf of Man		
	S	20/09/2010	Le Palais, Morbihan, France	755km S	11 yrs 56 days

The third French recovery of a Calf ringed Storm Petrel.

2543405	4	14/07/2002	Calf of Man		
	R	28/06/2012	Lunga, Treshnish Isles	289km NNW	9 yrs 350 days
2563071	4	21/08/2004	Calf of Man		
	R	10/08/2005	Calf of Man		354 days
	R	04/08/2012	Sanda Island, Kintyre	144km NNW	7 yrs 349 days
2591719	2	06/08/2010	Calf of Man		
	R	04/08/2012	Sanda Island, Kintyre	144km NNW	1 yr 364 days
2591833	4	01/08/2011	Calf of Man		
	R	02/07/2012	Sanda Island, Kintyre	144km NNW	336 days
	R	02/08/2012	Sanda Island, Kintyre	144km NNW	1 yr 1day
2591838	4	18/08/2011	Calf of Man		
	R	05/07/2012	Sanda Island, Kintyre	144km NNW	322 days
2563242	4	10/07/2005	Calf of Man		
	R	16/06/2006	Skomer Isle, Pembrokeshire	259km S	341 days
	R	26/06/2008	Skomer Isle, Pembrokeshire	259km S	2 yrs 352 days
	R	13/06/2011	Skomer Isle, Pembrokeshire	259km S	5 yrs 338 days

	R	27/07/2012	Skomer Isle, Pembrokeshire	259km S	7 yrs 17 days
	R	10/08/2012	Skomer Isle, Pembrokeshire	259km S	7 yrs 31 days
2591845	4	06/07/2012	Calf of Man		
	R	28/07/2012	Porth Iago, Llyn peninsula	133km S	22 days
2319043	4	27/07/2013	Ballyreagh, Londonderry		
	R	11/08/2013	Calf of Man	174km SE	15 days
2556279	4	10/08/2004	Sanda Island, Kintyre		
	R	13/08/2013	Calf of Man	144km SSE	9 yrs 3 days
2563298	4	23/07/2005	Calf of Man		
	R	17/06/2012	Priest Island, Highland	435km N	6 yrs 330 days
	R	16/06/2013	Priest Island, Highland	435km N	7 yrs 328 days
2644083	4	26/07/2009	East Light, Rathlin		
	R	07/08/2013	Calf of Man	164km SSE	4 yrs 12 days

Shag

1365110	1	15/05/2000	Calf of Man		
	XF	04/10/2012	Upper Sartfield, Isle of Man	40km NNE	12 yrs 142 days
1379530	1	04/05/2002	Calf of Man		
	XF	23/03/2013	Ramsey, Isle of Man	42km NE	10 yrs 323 days
1406371	1	24/04/2011	Calf of Man		
	X	17/02/2013	Mull of Galloway, Dumfries and Galloway	65km N	1 yr 299 days
1446329	1	24/04/2012	Calf of Man		
	XF	30/03/2013	Derbyhaven, Isle of Man	13km E	340 days
1468516	1	11/05/2012	Calf of Man		
	XF	01/03/2013	Point of Ayre, Isle of Man	49km NE	294 days
1468564	1	04/06/2012	Calf of Man		
	XF	03/04/2013	Point of Ayre, Isle of Man	50km NE	303 days
1468579	1	04/07/2012	Calf of Man		
	XL	02/02/2013	Croy, near Dunure, South Ayrshire	148km N	213 days
1468580	1	04/07/2012	Calf of Man		
	X	22/01/2013	Port St. Mary, Isle of Man	5km ENE	202 days
1468630	1	05/05/2013	Calf of Man		

X	28/06/2013	Port Erin, Isle of Man	5km NE	54 days
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Lesser Black-backed Gull

GC91027	1	20/06/2009	Calf of Man		
	VV	23/10/2009	Isla da Culatra, Faro, Portugal	1910km S	125 days
GR64542	1	23/06/2012	Calf of Man		
	R	04/07/2012	Calf of Man		11 days
	RR	20/12/2012	Duncannon Beach, Wexford, Eire	248km SW	180 days
GR64543	1	23/06/2012	Calf of Man		
	R	10/07/2012	Calf of Man		17 days
	RR	09/02/2013	Colmenar Viejo Landfill, Madrid, Spain	1491km S	231 days
	RR	10/02/2013	Colmenar Viejo Landfill, Madrid, Spain	1491km S	232 days
GR64613	1	04/07/2012	Calf of Man		
	RR	07/09/2012	Taboeira Landfill, Aveiro, Portugal	1515km S	65 days
	RR	23/04/2013	Quarteira Port, Faro, Portugal	1904km S	293 days
GR64661	1	10/07/2012	Calf of Man		
	RR	16/07/2013	Angeirs, Matosinhos, Porto, Portugal	1451km SSW	1 yr 6 days
GR64662	1	10/07/2012	Calf of Man		
	RR	12/12/2012	Sagres, Faro, Portugal	1921km S	155 days
	RR	18/05/2013	Quarteira Port, Faro, Portugal	1904km S	312 days

Six Calf ringed Lesser Black-backs have now been recovered in Portugal and two in Spain. Six of the sixteen chicks colour-ringed in 2012 have subsequently been re-sighted elsewhere. A first-winter bird colour-ringed on the Isle of Man in 2012 also wintered in Ireland at the same site as GR64542.

Herring Gull

GR64506	1	20/06/2012	Calf of Man		
	R	13/07/2012	Calf of Man		23 days
	RR	11/12/2012	St Stephens Green, Dublin, Eire	124km SW	174 days
GR64536	1	23/06/2012	Calf of Man		
	R	01/07/2012	Calf of Man		8 days
	R	03/07/2012	Calf of Man		10 days
	VV	26/11/2012	Peel, Isle of Man	20km NNE	156 days
GR64575	1	30/06/2012	Calf of Man		
	R	09/07/2012	Calf of Man		9 days
	VV	23/11/2012	Peel, Isle of Man	20km NNE	146 days
GR64611	1	04/07/2012	Calf of Man		

	VV	28/11/2012	Peel, Isle of Man	20km NNE	147 days
GR64636	1	07/07/2012	Calf of Man, Isle of Man		
	VV	28/12/2012	Peel, Isle of Man	20km NNE	174 days
GA39122	1	28/06/2002	Calf of Man		
	XL	17/09/2013	Port Erin, Isle of Man	5km NE	11 yrs 81 days
GJ89773	1	27/06/1984	Calf of Man		
	X	01/04/2013	Ennerdale Water, Cumbria	106km ENE	28 yrs 278 days
GN11075	1	27/06/1999	Calf of Man		
	X	05/05/2013	Greencastle, Down	76km W	13 yrs 312 days
GN53345	1	25/06/2011	Calf of Man		
	R	14/07/2011	Calf of Man		19 days
	RR	15/07/2012	Bray Harbour, Wicklow, Eire	127km SW	1 yr 20 days
	RR	20/03/2013	Ballycotton Pier, Cork, Eire	327km SW	1 yr 268 days
GR64526	1	20/06/2012	Calf of Man		
	R	01/07/2012	Calf of Man		11 days
	VV	05/04/2013	Peel, Isle of Man	20km NNE	289 days
GR64544	1	24/06/2012	Calf of Man		
	R	07/07/2012	Calf of Man		13 days
	RR	14/10/2012	Bray Harbour, Wicklow, Eire	127km SW	112 days
	RR	24/01/2013	Dunmore East Harbour, Waterford, Eire	256km SW	214 days
	RR	13/02/2013	Dunmore East Harbour, Waterford, Eire	256km SW	234 days
GR64598	1	01/07/2012	Calf of Man		
	VV	20/10/2012	Peel, Isle of Man	20km NNE	111 days
	VV	12/12/2012	Peel, Isle of Man	20km NNE	164 days
	VV	13/12/2012	Peel, Isle of Man	20km NNE	165 days
	RR	24/01/2013	Peel, Isle of Man	20km NNE	207 days
	VV	05/02/2013	Peel, Isle of Man	20km NNE	219 days
	VV	07/02/2013	Peel, Isle of Man	20km NNE	221 days
	VV	11/02/2013	Peel, Isle of Man	20km NNE	225 days
	VV	23/02/2013	Peel, Isle of Man	20km NNE	237 days
	VV	28/02/2013	Peel, Isle of Man	20km NNE	242 days
	VV	01/03/2013	Peel, Isle of Man	20km NNE	243 days
	VV	12/03/2013	Peel, Isle of Man	20km NNE	254 days
	VV	28/03/2013	Peel, Isle of Man	20km NNE	270 days
GR64622	1	07/07/2012	Calf of Man		
	RR	05/01/2013	Dunmore East Harbour, Waterford, Eire	256km SW	182 days
GR64633	1	07/07/2012	Calf of Man		

	VV	28/02/2013	Peel, Isle of Man	20km NNE	236 days
GR64672	1	11/07/2012	Calf of Man		
	VV	07/02/2013	Peel, Isle of Man	20km NNE	211 days
GR64799	1	30/06/2013	Calf of Man		
	XL	04/08/2013	Derbyhaven, Isle of Man	12km E	35 days

Great Black-backed Gull

HT26632	1	24/06/1989	Calf of Man		
	V	09/06/2013	East of Caigher, at sea, Irish Sea	2km SSW	23 yrs 350 days
HT95124	1	26/06/2012	Calf of Man		
	R	11/07/2012	Calf of Man		15 days
	RR	17/04/2013	Bullock Harbour, Dalkey, Eire	120km SW	295 days
MA29037	1	11/07/2010	Ireland's Eye, Dublin, Eire		
	RR	03/05/2013	Calf of Man	110km NE	2 yrs 296 days

Razorbill

K04767	1	24/06/2012	Calf of Man		
	XL	13/02/2013	Cwmtedu, Ceredigion	209km S	234 days

Rock Pipit

2621833	5	20/01/2011	Poyllvaish, Isle of Man		
	RR	04/06/2013	Calf of Man	9km WSW	2 yrs 135 days
2621835	5	20/01/2011	Poyllvaish, Isle of Man		
	RR	02/04/2011	Calf of Man	9km WSW	78 days
	RR	28/04/2011	Calf of Man	9km WSW	92 days
	RR	01/05/2013	Calf of Man	9km WSW	2 yrs 101 days

These two birds both held territories on Caigher Point in 2013 and were originally caught and colour-ringed at the same time in 2011 on the Isle of Man.

Robin

X210864	3J	27/06/2009	Calf of Man		
	R	16/07/2009	Calf of Man		19 days
	R	06/08/2009	Calf of Man		40 days
	R	13/03/2013	Jurby East, Isle of Man	41km NNE	3 yrs 259 days

Wheatear

Y539946	3	30/07/2012	Calf of Man		
	R	27/03/2013	Portland Bill, Dorset	424km SSE	240 days
	R	29/03/2013	Portland Bill, Dorset	424km SSE	242 days

Y539953	3	30/07/2012	Calf of Man		
	R	12/04/2013	Seaforth, Liverpool	134km ESE	256 days

Blackbird

L262074	3M	22/10/2007	De Cocksdorp, Texel, Netherlands		
NLA	R	26/03/2008	Calf of Man	642km W	156 days
LC33659	4M	13/10/2012	Gibraltar Point, Lincolnshire		
	R	21/10/2012	Calf of Man	355km WNW	8 days
7868432	5F	12/04/2010	Helgoland, Germany		
DEW	R	07/04/2013	Calf of Man	829km W	2 yrs 360 days

The second Dutch and third German ringed Blackbirds to be controlled on the Calf.

Sedge Warbler

6474807	3	13/08/2012	Marais de Pompas, Herbignac, Loire-Atlantique, France		
FRP	R	01/05/2013	Calf of Man	759km NNW	261 days

The total of Sedge Warblers ringed in France and controlled on the Calf now stands at 12.

Chiffchaff

DKN560	4	02/04/2012	Calf of Man		
	XF	07/05/2013	Ballymorris, Tipperary, Eire	279km SW	1 yr 35 days

Willow Warbler

EAL015	4	02/05/2	Bardsey Island, Gwynedd		
	R	04/05/2012	Calf of Man	144km N	2 days

A rapid movement north.

Goldcrest

DKN664	5M	13/04/2012	Calf of Man		
	R	02/05/2012	Bardsey Island, Gwynedd	144km S	19 days
	R	03/05/2012	Bardsey Island, Gwynedd	144km S	20 days
EDD790	3F	06/10/2012	Calf of Man		
	XF	24/02/2013	Bovington Camp, Dorset	413km SSE	141 days

Great Tit

X211357	3F	15/10/2009	Calf of Man		
	R	13/03/2013	Jurby East, Isle of Man	41km NNE	3 yrs 149 days

Chough

EW81578	1	25/05/2010	near Derbyhaven, Isle of Man		
	RR	11/05/2012	Calf of Man	13km W	1 yr 352 days

EW81916	1	25/05/2012	near Cregneash, Isle of Man		
	XF	17/09/2012	Calf of Man	1km W	115 days

EW68744	1	09/06/2013	near Cregneash, Isle of Man		
	RR	26/08/2013	Calf of Man	1km W	78 days

EW68745	1	09/06/2013	near Cregneash, Isle of Man		
	RR	24/08/2013	Calf of Man	1km W	76 days

Chaffinch

9R81071	4F	06/06/2011	Grenen, Syviastien, Skagen, Denmark		
DKC	R	22/10/2012	Calf of Man	1046km WSW	1 yr 138days

Four foreign ringed Chaffinches have now been controlled on the Calf; this was the first from Denmark.

Y362032	3F	08/10/2011	Calf of Man		
	XF	14/05/2013	Kippford, Dalbeattie, Dumfries and Galloway	111km NE	1 yr 218 days

Y596030	5F	15/05/2012	Fleetwood, Lancashire		
	R	28/05/2013	Calf of Man	119km W	1 yr 13 days

Y859322	3F	25/10/2012	Calf of Man		
	XF	21/03/2013	Lower Ballafodda, Ronague, Isle of Man	11km NE	147 days

Y863660	5F	11/04/2013	South Walney Bird Obs, Cumbria		
	R	02/05/2013	Calf of Man	105km W	21 days

Greenfinch

TL31799	3F	13/10/2011	Calf of Man		
	XF	25/10/2012	Ballamodha, Isle of Man	13km NE	1 yr 12 days

TL31561	3M	12/10/2009	Calf of Man		
	XF	22/09/2013	Ballnalarghy, Dalby, Isle of Man	14km NNE	3 yrs 345 days

Goldfinch

R747961	3J	24/09/2008	Calf of Man			
	R	03/01/2010	La Fardeliere, Tierce, France	779km SSE	1 yr 101 days	
Y539188	5M	23/04/2012	Calf of Man			
	R	16/12/2012	Thetford Lodge Farm, Suffolk	407km ESE	237 days	
	R	19/12/2012	Thetford Lodge Farm, Suffolk	407km ESE	240 days	
D134270	4F	06/11/2012	Queen Mary Reservoir, Surrey			
	R	01/05/2013	Calf of Man	413km NW	176 days	
6683175	5F	01/01/2012	Les Roberts, Liart, Ardennes, France			
FRP	R	07/04/2013	Calf of Man	787km NW	1 yr 96 days	
X211840	1J	16/06/2010	Calf of Man			
	R	24/06/2010	Calf of Man		8 days	
	R	28/01/2012	Haigh Hall, Wigan, Greater Manchester			
				154km ESE	1 yr 226 days	
	R	06/01/2013	Haigh Hall, Wigan, Greater Manchester			
				154km ESE	2 yrs 204 days	
Y539781	6M	01/06/2012	Calf of Man			
	R	18/04/2013	Leswalt, Dumfries and Galloway	100km N	321 days	

The number of Goldfinches ringed on the Calf has increased dramatically in recent years and is yielding some interesting recoveries. Birds caught in the spring have shown great variation in their choice of wintering areas. R747961 is the second French recovery of a Calf ringed bird, whereas 6683175 is the first foreign ringed Goldfinch to be controlled on the Calf (the second, with a Belgian ring was trapped on 2nd May and we are still waiting for the original ringing details).

Lesser Redpoll

L215204	4M	19/04/2011	Calf of Man			
	R	01/05/2013	Meols, Wirral, Merseyside	132km SE	2 yrs 12days	
L614923	3	13/10/2012	South Foreland, Kent			
	R	28/05/2013	Calf of Man	528km NW	227 days	
Y607921	5F	10/01/2013	Greens Norton, Northamptonshire			
	R	07/05/2013	Calf of Man	330km NW	117 days	
Y980651	6	17/02/2013	Highley, Shropshire			
	R	04/05/2013	Calf of Man	240km NW	76 days	

Another good series of recoveries illustrating the wide range of autumn and winter locations of Lesser Redpolls passing through the Calf in spring.

Key to codes used in this report

Age codes:

- 0 – Unknown or not specified
- 1 – Nesting or chick not yet able to fly
- 2 – Full grown, year of hatching unknown
- 3J – Young in juvenile plumage and able to fly freely
- 3 – Definitely hatched during current calendar year
- 4 – Hatched before current calendar year, exact year unknown
- 5 – Definitely hatched during last calendar year
- 6 – Hatched before last calendar year, exact year unknown

Sex:

- M – Male
- F – Female

Capture type:

- R – Recaptured and released by a ringer
- S – Sick or injured, not known to have been released
- X – Found dead
- XL – Found long dead; over a week
- XF – Found freshly dead; less than a week
- VV – Rings read in the field, not by a ringer
- RR – Rings read in the field by a ringer

The co-ordinates for the Calf of Man are: 54°3'N 4°49'W.

Manx Shearwater Breeding Survey 2013

Introduction

Following the re-discovery of breeding Manx Shearwaters on the Calf in 2000, surveys of the breeding population have focused on determining the occupancy of established burrows year on year. When time and manpower has allowed, new sub-colonies have been searched for. As a result of this effort the extent of five sub-colonies is known and mapped. All burrows that have been occupied in at least one year are marked on land with numbered sticks or slates and their GPS co-ordinates are logged. Each marked burrow therefore has an annual history of occupation dating back to its discovery. However, the effort spent searching for new sub-colonies has varied widely over the years and the most recently discovered new sites date back to 2005.

It has long been posited that given the large extent of suitable habitat, numerous rabbit burrows and high levels of bracken cover, slopes on the Calf's north coast are a likely location for breeding Shearwaters. With the Manx Shearwater Recovery Project finishing its first winter of operation, it was felt that this year offered an excellent opportunity to clarify the use of the entire island by breeding shearwaters (including the north coast and all established sub-colonies). Data from a full island survey in 2013 would provide baseline data to which results of surveys in future years could be compared and the impact of the rat eradication on Shearwater breeding numbers assessed.

During the monitoring of Shag nests on the north coast in early May, Manx Shearwater droppings were found at the entrance to a burrow on a steep slope west of Bay Fine. A casual search of the surrounding area saw the discovery of four more burrows with visible signs of occupation. The results of the full survey a month later were therefore eagerly anticipated!

Methods

Discovering the extent of the species distribution on the island during the breeding season was one of the key objectives, so the entire coastline was surveyed (the inland limit was provided by the coastal footpath, except at South Harbour where the northern boundary of the existing sub-colony was followed). Areas that could not be safely accessed were omitted (this mainly applied to a few sections of the north coast, for example east of Gibdale, east of Bay Fine and around Baie yn Ooig where coastal slopes are exceedingly steep and/or unstable). There is no evidence to suggest that Shearwaters currently breed in non-coastal parts of the island and, with only limited manpower available, the survey was restricted to the coast. It is hoped that when the survey is repeated in future it may be possible to include inland parts of the island. The census in these areas could perhaps be carried out within sample quadrats if full coverage is not possible.

Standard playback methodology was followed as described in the JNCC Seabird Monitoring Handbook. The call of a male was played for 15 seconds at the entrance to all burrows within the survey area whilst the surveyor listened for a response from within. Normally, only males respond to this call but either sex can be present in the burrow during incubation. As a result, the total number of responses is likely to represent an under-estimate of the breeding population. To allow for this, a calibration test was carried out

before the start of the survey to establish the male response rate and in turn, allow the calculation of a correction factor that could be applied to the total number of responses to give an estimate of the total number of occupied burrows (or sites, AOS). 39 burrows were selected for this test on 29th May (marked burrows at each colony were randomly visited and the first with positive responses were used). Each was then visited daily between 30th May and 4th June and the response recorded. The mean number of responses per visit was 22.5 and the mean proportion of responding males per visit was 0.5769. This yielded a correction factor of 1.733 (ie 22.5 responses x 1.733 = 39 (or 38.9925) – the number of burrows known to be occupied. When carrying out breeding Manx Shearwater surveys, it is recommended that correction factors for response rates are calculated for each colony as they are thought to vary from place to place. Our figure was lower than the 1.98 (derived from a study on Skokholm) given in the Seabird Monitoring Handbook and currently used to calculate Shearwater populations on other islands (eg Bardsey and Copeland). This discrepancy may be an example of such inter-colony variation but as our sample size of 39 was lower than would be ideal (due to the still relatively small breeding population on the Calf and the time-consuming nature of the task) results calculated using the 1.98 factor are also presented below.

In addition, the number of burrows showing visible signs of occupation (eg flattened grass and droppings in the entrance etc.) was recorded separately. The survey took place between 5th June and 5th July with a total of 3562 burrows surveyed on 22 dates by a team of three surveyors.

Results

Number of burrows surveyed	3562
Number of responses	176
Number of AOS (using 1.733 correction factor)	305
Number of AOS (using 1.98 correction factor)	348
Number of burrows showing visible signs of occupation	716

Discussion

The 176 responses yielded an estimate of 305 AOS when the Calf correction factor was applied or potentially up to 348 AOS using the standard correction factor. This represents a massive increase on the 147 AOS recorded in 2012. Whilst there may have been some recent growth in the population, the discovery of new breeding sub-colonies brought about by the new survey methodology accounts for much of this change. The number of burrows showing visible signs of occupation (716) was strikingly high. With such a large discrepancy between this figure and that from the playback responses it may well be that many burrows are long and/or contain twists or turns that prevent birds from hearing the call, or us from hearing their response. It is also possible that non-breeding birds are occupying some of these burrows and may show differences in their responses to playback. However, whilst care was taken to ensure that each of the three surveyors was looking for consistent features, the final assessment of 'visible signs of occupation' could be said to be slightly subjective.



Manx Shearwater Chick Photo: Will Hayward

The sub-colony west of Bay Fine, initially found a month before the start of the survey was the largest new sub-colony, holding at least 15 fairly widely spread AOS. Similar bracken covered slopes nearby could not be thoroughly searched as parts were too dangerous to access so the actual size may be larger. Small clusters of AOS were found in several new areas, including in a small grass and bracken covered area at the top of the cliff above Bay Fine and on the particularly steep slopes east of Gibdale that extend towards Kione Beg. Again, this stretch of coastline was very steep and a few areas of apparently suitable habitat could not be checked. On the south coast, a small number of new AOS were found south-west of the existing sub-colony of Kione Roauyr (and slightly further down the slope). As far as it was possible tell, (as the previously used sub-colony boundaries were not followed this year) most existing sub-colonies showed relatively similar rates of occupation compared to 2012. South Harbour was the only area to show a noticeable increase on the previous year.

Other Work

Efforts to confirm occupancy of the 39 calibration burrows using an endoscope in early June were unsuccessful. This method was attempted on the Calf in 2008 and the same difficulties were met. In many cases the nest chamber was too far down the burrow, out of reach of the endoscope. Any burrow with more than one twist or turn before the end was also unable to be viewed as the endoscope only had limited manoeuvrability once underground.

Nevertheless, it is hoped that work to monitor productivity across the different sub-colonies can be carried out in future (ideally encompassing the calibration burrows). Unless a more suitable endoscope can be found, opening a number of study burrows and fitting an inspection hatch may be the best way to do this.

Ringling

In July and August, time was devoted to ringing any Shearwater chick within reach of the burrow entrance. All burrows where this had been done successfully in previous years were re-visited and as many new sites as possible were also tried. Nine chicks were ringed. Later in August and in early September sub-colonies were visited at night in order to catch and ring young Shearwaters sitting outside their burrows. This proved more successful with another 16 birds ringed, including at least one from each main sub-colony

Attempts were made throughout the season to dazzle adult Shearwaters at night as they moved around on the ground after landing or before taking off. Most birds trapped using this method were caught in May and August on moonless or foggy nights. Adults were also removed from accessible burrows for ringing in June and July. The oldest Calf ringed bird dated from 2003 (when it was ringed as an adult). A control ringed as a chick on Bardsey in 2005 was also notable, caught at night in South Harbour in May, where it is presumably breeding.

Acknowledgements

The survey would not have been possible this year without the hard work of three dedicated volunteers. Alice Dickson and Hannah Mitchell stayed throughout June and were vital in carrying out the playback survey. Andrew Godden also provided great help with the monitoring of the calibration burrows.

Notes on Breeding Seabirds 2013

As usual, the breeding success of Shags and Razorbills was monitored at the three largest and most accessible colonies:

	Kione ny Halby	Gibdale	Bay Fine
Shag			
AON	57	26	23
Chicks fledged	64	44	32
Productivity	1.12	1.69	1.39
Razorbill			
AON	2	18	13
Chicks fledged	0	8	3
Productivity	0	0.44	0.23

The Kione ny Halby Shag colony showed a significant increase in the number of AON compared to the last two years (41 in 2012 and 47 in 2011). The numbers of AON at the Gibdale and Bay Fine colonies also showed a slight increase on last year (both had 22 AON in 2012). Unlike 2012 and 2013, Gibdale proved the most productive colony. Despite the high number of breeding attempts at Halby, a much larger proportion of nests failed than the other colonies. This mostly occurred during April when the nests were at the egg stage. The productivity at Bay Fine was very similar to 2012 (1.45), continuing the colony's revival after almost complete decimation 2011 (when circumstantial evidence strongly suggested Brown Rats were the culprits). This year, 12 Shag nests were also monitored at Baie yn Ooig. 18 young fledged from 13 nests, resulting in a productivity of 1.38 fledged young per nest, almost identical to that at Bay Fine, one of the closest large colonies.

After no Razorbills fledged from monitored nests in 2012, in some respects this year could be said to have been a success for the species. However, productivity was low with high levels of predation recorded at both the Gibdale and Bay Fine colonies. As ever with this species, AON may well be under-recorded with parts of even these most accessible colonies very difficult to monitor or even reach. It remains unknown how these productivity figures compare with the Calf's main breeding concentrations of Razorbills in and around Ghaw Yiarn and on the north coast west of Amulty.



Colour-ringed GBBG 1AP Photo: Will Hayward

Non-Avian Species Report

Mammals

Brown Rat *Rattus norvegicus*

Incidences of bait take by rats as part of the Shearwater Recovery Project peaked in late autumn 2012 with the program appearing to have had the desired effect in early 2013. Worryingly, however, rat tooth marks were recorded from one monitoring station at Bushell's during the summer. A contingency plan of increased trapping and monitoring effort was put into action and no further signs of the species were recorded.

Pygmy Shrew *Sorex minutus*

Seen occasionally throughout the year, with one confiding individual providing regular sightings in the seawatch hide at Cow Harbour. Shrew droppings were again regularly found inside the plastic bait tubes spread across the island.

Rabbit *Oryctolagus cuniculus*

Extremely common throughout the year, though myxomatosis was again prevalent during both the spring and the autumn. Black rabbits were regularly seen, with up to five at the usual warren halfway up the glen and others above Gibdale and Bay Fine.

Common Pipistrelle Bat *Pipistrellus pipistrellus*

A bat detector was used on 22nd September to confirm that two bats flying around the Observatory buildings were of this species. Single small bats seen in the same area on 22nd July and on four dates in August were probably also Common Pipistrelles.

Brown Long-eared Bat *Plecotus auritus*

One was caught in a mist net near the front hedge before dawn on 15th October.

Grey Seal *Halichoerus grypus*

Seen every day, especially at regular haul out spots around the Cletts, Cow Harbour and South Harbour. A peak count of 120 was made on 13th May. The first pup was seen on 20th September, with a record total of 47 counted by the end of the season.

Common Seal *Phoca vitulina*

Up to four were seen sporadically between 8th April and 4th July, hauled out with Grey Seals, mainly at Cow Harbour. In the autumn, one individual was seen on four dates between 21st September and 26th October.

Harbour Porpoise *Phocoena phocoena*

The first three off Culbery on 13th March were followed by regular sightings through to the end of July. The peak count of 12 off the north coast was made on 16th May, with 10 off Culbery on 7th July the only other double figure count. In autumn, there was only one record; a single off Cow Harbour on 30th October.

Risso's Dolphin *Grampus griseus*

Six off Culbery on 7th July were followed by five two days later that showed extremely well just out from the Upper Lighthouse. At least 12 were seen off the east side of the island on

14th July. On 6th August, nine first seen in the Sound then moved west past the north coast. The final five of the year were watched off South Harbour on 13th August.

Common Bottle-nosed Dolphin *Tursiops truncatus*

A good series of records occurred early in the year. On 27th March, a group of at least 12 moved west close to the shore around the south of the island. Six were feeding off the stack on 9th April with two seen off Culbery on the following day.

Dolphin sp.

Two dolphins seen off the Puddle on 19th May were not assigned to species.

Fish

Basking Shark *Cetorhinus maximus*

Two seen from Big Head and one off the Burroo on 28th May were followed by daily sightings of up to four through to 5th June during a glorious hot and sunny spell. Unsettled weather conditions for the rest of June put a halt to any more records, and the only other sighting was a single off South Harbour on 17th July.

Reptiles

Common Lizard *Lacerta vivipara*

Sightings of small numbers were regularly made between 19th April and 28th September. The Withy boardwalk and the base of stone walls around the Sea Field were reliable basking spots on warm sunny days.

Odonata

Blue-tailed Damselfly *Ischnura elegans*

Present on the Mill Pond between 4th June and 25th July. A maximum of only 10 was recorded in June but larger numbers were seen in July with a peak of 40 on 3rd.

Common Darter *Sympetrum striolatum*

The first seen on 22nd July just above Jane's House was followed by two further records that month. More frequent sightings were made the following month, with up to five recorded in the Withy area during both August and September. The final record was a single on 10th October.

Hawker sp *Aeshna sp*

A large dragonfly seen briefly in flight near the dock on 22nd October was thought likely to have been a Hawker sp.

Butterflies

The abundance and variety of butterflies on the Calf of Man are monitored by using the transect method. A fixed route around the island is walked on a weekly basis between April and September (although this is weather dependant), and butterflies within a five metre band either side of the transect route are recorded. This is the seventeenth year of recording butterflies along the established transects route. Casual observations were also made on a daily basis and recorded in the log.

There are eight transect sections which are as follows:

- 1: The Observatory to the crossroads.
- 2: The crossroads to the top of Mill Giau.
- 3: The top of Mill Giau up the Glen to the gate, following the west side of the wall.
- 4: The gate back down the Glen to the Mill, following the track.
- 5: The Mill to South Harbour stores
- 6: South Harbour stores to Ghaw Yiarn.
- 7: Ghaw Yiarn to the junction above Cow Harbour.
- 8: Cow Harbour junction to the wall at the start of the netting area.

The cold spring meant that emergence of the early species was delayed by several weeks. In April, fewer than ten butterflies were seen and May was also much quieter than usual. Warm conditions in late summer, however, saw excellent numbers on the wing from July onwards. Good counts of Dark Green Fritillary, Small Copper and Red Admirals in particular, were made during this period.

Small White *Pieris rapae*

Following just one sighting in 2011 and none in 2012, this year there were five records; a single on 27th July, two, one and two on 15th, 23rd and 31st August respectively and two on 2nd September.

Large White *Pieris brassicae*

Six records; singles were recorded on 29th July, three dates in August and 9th September. Three were also logged on 5th September.

Green-veined White *Pieris napi*

The first on 27th April was followed by irregular sightings of up to eight during May. Up to 39 were seen most days in June, with a peak of 15 in July. After a blank two weeks at the start of August, double-figure counts of up to 40 were made up until the month's end. September saw only sporadic records of up to five with the last two occurring on 10th.

Small Copper *Lycaena phlaeas*

Did not emerge until the relatively late date of 28th May. Sightings were then regular through to July, reaching a maximum of 20 on 6th June. After a few occasional records the species was then seen more or less daily for a month from mid-August with 10 double-figure counts including a peak of 36 on 18th August. Numbers then declined and sightings became infrequent, with the last three logged on 15th October.

Red Admiral *Vanessa atalanta*

After the first one on 7th May, up to two were seen on ten days up to 31st. The next sighting did not occur until 16th July, after which up to six were seen to the end of the month. The species was seen daily in good numbers from mid-August, with a peak of 30 present on 16th and double-figure counts made on a further sixteen dates into early September. Records were then more sporadic, with up to five noted until the last one on 3rd November.

Painted Lady *Cynthia cardui*

A single on 27th July was followed by regular sightings of up to four between 8th August and 10th September. One on 23rd October was the final record.

Small Tortoiseshell *Aglais urticae*

First seen by the Silo on 18th April then up to two were noted occasionally until mid-May. The next record on 12th July was followed by sporadic sightings through to the last on 23rd October. September saw the most records (18) with 10 on 14th the only double-figure count of the year.

Peacock *Inachis io*

First seen on 19th April at Caigher Point, with the next record not coming until 8th August. Up to five were then seen on 17 dates through to 19th September.

Dark Green Fritillary *Argynnis aglaja*

First seen on 16th June near the Upper Lighthouse, with five further records of up to 16 before the month's end. Recorded daily in July with the peak period falling between 7th and 13th when triple-figure counts were made on four dates, reaching a maximum of 200 on 11th and 12th. The rest of the month saw double-figure counts on all days but one. One on 13th September was the only other record.

The Wall *Lassiomata megera*

In June up to four were seen on five dates between 8th and 24th. One on 31st August was the next record and was followed by three and one on 5th and 9th September respectively.

Grayling *Hipparchia semele*

Seen on thirteen dates between 12th July and 5th September. July had the most records (nine) and the highest daily maximum (eight on 29th). The north coast and the cliffs below the Lower Lighthouse were reliable areas for a sighting.

Meadow Brown *Maniola jurtina*

Numbers built up in July after the first one on 4th, reaching triple-figures on two dates (102 on 27th and 153 on 28th). The species was present in much reduced numbers during August, with a daily maximum of 20. Singles on 2nd and 9th September were the final records.

Common Blue *Polyommatus icarus*

Only six records; two were seen on both 24th June and 3rd July, with singles also noted on 7th and 10th July. One on 21st August and two on 9th September were the remaining sightings.

Moths

A total of 126 moth species was recorded during 2013 (92 macro-moth species and 34 micro-moth species). Regular trapping was combined with an increased effort to record day flying moths, particularly micro moth species. 82 trap nights were run between 29th March and 15th October. On all but two of these nights, traps were positioned close to the Observatory, with several different sites used. Two traps were set in the Withy on one night in July which yielded a good catch, including several species infrequently recorded on the Calf. Unfortunately, this location was not used again due to other commitments, but regular sampling there would surely produce some interesting records.

The 60W Actinic Heath trap obtained last year was used regularly, with the 30W battery-powered Heath trap often operated as an additional trap during the summer. Unfortunately, there were ongoing problems with the power supply to the Robinson 125W MV trap which, as a result, was only used occasionally at the start of the season.

Two new micro moth species were added to the Calf list: *Agonopterix nervosa* and Triangle Plume. Further records of note included the second Calf occurrences of *Agonopterix subpropinquella*, Orchard Ermine, *Anania coronata* and July Belle, and the third record of Pink-barred Sallow. It was another poor year for migrant moths but several resident species were well represented and the discovery of a mating pair of Poplar Hawkmoths was notable.

All moth species recorded in 2013 are detailed in the systematic list below.

18. Map-winged Swift *Hepialus fusconebulosa*

Four were trapped between 20th June and 18th July. A more typical series of records following the bumper numbers recorded in 2012.

169. Six-spot Burnet *Zygaena filipendulae*

The first nine emerged on 5th July after which small counts were made daily until 29th July. The thistles in the Upper Twin Field were the best place to see the species, with a peak of 20 noted on 7th July.

385. Nettle Tap *Anthophila Fabriciana*

One was trapped on 22nd July.

397. Glyphipterix thrasonella

Eight were recorded in Big Park on 29th June and a single was recorded on 18th July.

425. Orchard Ermine *Yponomeuta padella*

One was trapped on 21st July. This was the second Calf record with the first having occurred on 18th July 2002.

464. Diamond-backed Moth *Plutella xylostella*

The only record of the year was a single trapped in the Back Field on 27th July.

647. **Brown House-moth** *Hofmannophila pseudospretella*

Singles were recorded inside the farmhouse on 20th July and 21st August.

648. **White-shouldered House-moth** *Endrosis sarcitrella*

Five were seen inside the farmhouse on 1st May.

672. **Parsnip Moth** *Depressaria radiella*

One was trapped on 4th June.

692. *Agonopterix subpropinquella*

A single trapped on 15th October was the second Calf record following one on 2nd May 2008.

697. *Agonopterix arenella*

The two caught on the 2nd June was only the second Calf record after another brace on 12th May 2008.

706. *Agonopterix nervosa*

The first for the Calf was trapped on 29th July.

776. *Teleiopsis diffinis*

Two were caught on 19th August.

873. *Blastobasis adustella*

14 were trapped between 30th June and 25th August.

946. *Aethes rubigana*

Five were trapped between 9th and 25th July.

966. *Cochylis atricapitana*

Singles were caught on 26th and 27th August.

970. **Barred Fruit-tree Tortrix** *Pandemis cerasana*

18 were trapped between 10th and 24th July.

972. **Dark Fruit-tree Tortrix** *Pandemis heparana*

Singles were trapped on 18th and 21st August and 2nd September.

1062. *Acleris emargana*

A single was caught on 21st August.

1076. *Celypha lacunana*

Seven were recorded between 26th July and 29th August, with three trapped and four day records.

1175. **Bramble Shoot Moth** *Notocelia uddmanniana*

One was caught on 24th July, the first record since 2005.

1197. *Eucosma campoliliana*

Two were trapped on 10th July, with another caught on 22nd July.

1201. *Eucosma cana*

One on 24th June was the only record.

1293. **Garden Grass Veneer** *Chrysoteuchia culmella*

Six were trapped on five dates between 29th June and 18th July.

1304. *Agriphila straminella*

Seven were trapped between 21st and 29th July.

1305. *Agriphila tristella*

Six were in the traps between 27th July and 28th August.

1309. *Agriphila geniculea*

All records occurred in August with 43 caught on seven dates between 18th and 29th.

1334. *Scoparia ambigualis*

17 were trapped between 30th June and 30th July.

1344. *Eudonia mercurella*

Singles were caught on 26th and 30th July.

1345. **Brown China-mark** *Elophila nympheata*

One trapped in the Withy on 19th July was only the fourth Calf record.

1376. **Small Magpie** *Eurrhynx hortulata*

Seven individuals were caught between 18th June and 23rd July.

1378. *Anania coronata*

A single trapped on 21st July was the second Calf record after one on 4th July 1998.

1395. **Rusty-dot Pearl** *Udea ferrugalis*

One was caught on 21st July.

1405. **Mother of Pearl** *Pleuroptya ruralis*

Singles were caught on 23rd and 24th July.

1428. **Bee Moth** *Aphomia sociella*

One was trapped on 22nd July.

1501. **Triangle Plume** *Platyptilia gonodactyla*

One found in the Warden's kitchen on 1st September was the first for the Calf.

1643. Emperor Moth *Pavonia pavonia*

Two records, though neither was alive. One was seen in the bill of a Spotted Flycatcher in the Front Field on 18th May and a wing of a male was found on the footpath above Kione ny Halby on 29th May.

1689. Mullein Wave *Scopila marginepunctata*

Five were caught between 15th July and 29th August.

1702. Small Fan-footed Wave *Idaea biselata*

One was found inside the ringing room on 15th August.

1708. Single-dotted Wave *Idaea dimidiata*

The only record of the year was trapped on 18th August.

1713. Riband Wave *Idaea aversata*

A single caught on 29th June was the sole record.

1722. Flame Carpet *Xanthorhoe designate*

Four were trapped between 3rd June and 23rd July.

1727. Silver-ground Carpet *Xanthorhoe montanata*

One trapped on the 18th July was the only record.

1728. Garden Carpet *Xanthorhoe fluctuata*

The only record was a single trapped on 29th June.

1734. July Belle *Scotopteryx luridata plumbaria*

One trapped in the Withy on 19th July was only the second Calf record after the first on 17th June 2007, also in the Withy.

1738. Common Carpet *Epirrhoe alternata alternata*

One caught on 13th August was the only record.

1742. Yellow Shell *Camptogramma bilineata*

Commonly seen during the day between 1st July and 2nd September. July was the best month with a peak count of 50 on 13th.

1752. Purple Bar *Cosmorhoe ocellara*

32 were recorded between 3rd June and 29th July, peaking at nine on 27th July.

1755. Chevron *Eulithis testate*

Singles were caught on 19th and 29th August.

1760. Red-green Carpet *Chlorclysta siterata*

A rather worn individual caught on 6th June was the first summer record for the Calf. In the autumn, one was caught on the more typical date of 15th October.

1776. **Green Carpet** *Colostygia pectinataria*

One was trapped on 20th July.

1777. **July Highflyer** *Hydriomena furcata*

Two caught on 24th July were followed by a further 12 records through to the last on 8th September.

1830. **Wormwood Pug** *Eupithecia absinthiata*

Nine were caught between 30th June and 26th July.

1834. **Common Pug** *Eupithecia vulgate*

Eight were trapped between 4th June and 10th July.

1846. **Narrow-winged Pug** *Eupithecia nanata*

One on 11th July was the only record.

1884. **Magpie** *Abraxas grossulariata*

A single was caught on 29th July.

1902. **Brown Silver-line** *Petrophora chlorosata*

A very quiet year for this species with only 25 records between 7th May and 20th June.

1906. **Brimstone** *Opisthograptis luteolata*

One trapped on 24th July was the only record.

1922. **Swallow-tailed Moth** *Ouapteryx sambucaria*

A single was caught in the back garden on 21st July.

1937. **Willow Beauty** *Peribatodes rhomboidaria*

Singles were caught on 11th July and 18th August.

1952. **Common Heath** *Ematurga atomaria*

Seen commonly during the day between 25th May and 24th June, with peak counts of 20 made on 12th and 16th June.

1964. **Annulet** *Charissa obscurata*

Singles were caught on 18th and 27th July.

1981. **Poplar Hawkmoth** *Laothoe populi*

Thirteen recorded between 4th and 26th June included a pair seen mating on rushes close to the Front Hedge on 17th.

1984. **Hummingbird Hawkmoth** *Macroglossum stellatarum*

One feeding in the Front Garden on 11th August was the only record of the year.



Poplar Hawkmoth (pair) Photo: Will Hayward

995. Puss Moth *Cerura vinula*

One was trapped at the Observatory on 10th June and another was seen in the Withy on 17th June.

2003. Pebble Prominent *Notodonta ziczac*

A single caught on 16th July was the only record.

2047. Scarce Footman *Eilema complana*

One trapped on 27th July was the first record since 2003.

2056. Wood Tiger *Parasemia plantaginis plantaginis*

One was seen on 8th July, feeding on the coastal slopes north of the Upper Lighthouse.

2057. Garden Tiger *Arctia caja*

All records occurred in July, with 129 trapped between 4th and 30th with a maximum catch of 23 on 16th.

2060. White Ermine *Spilosoma lubricipeda*

30 were trapped between 1st June and 18th July.

2061. Buff Ermine *Spilosoma luteum*

140 were caught between 18th June and 22nd July. The peak count of 15 occurred on 25th June.

2064. Ruby Tiger *Phragmatobia fuliginosa*

Singles were trapped on 4th, 8th, 20th and 29th June.

2069. Cinnabar *Tyria jacobaeae*

After the first was trapped on 1st June, the species was regularly encountered during the day through to the final record on 27th July. Peak counts of 28 were made on 11th and 13th July. Cinnabar caterpillars were again abundant on Ragwort around the Observatory during the late summer.

2078. Least Black Arches *Nola confusalis*

Singles were caught on 7th and 19th June.

2081. White-line Dart *Euxoa tritici*

An extremely poor year, with only one record on 8th September.

2089. Heart and Dart *Agrotis exclamationis*

Singles were caught on 20th and 30th June and 10th July.

2090. Crescent Dart *Agrotis trux*

In total 192 were trapped between 10th and 29th July, peaking at 48 on 27th.

2091. Dark Sword-grass *Agrotis ipsilon*

One trapped on 10th September was the only record.

2098. Flame *Axylia putris*

A single caught on 4th July was the first record since June 2007.

2102. Flame Shoulder *Ochropleura plecta*

Five were trapped between 4th June and 16th July.

2104. Northern Rustic *Standfussiana lucernea*

Singles were trapped on 11th and 18th July.

2107. Large Yellow Underwing *Noctua pronuba*

131 were trapped between 24th June and 12th October. July was the peak month with 111 records.

2109. Lesser Yellow Underwing *Noctua comes*

One found inside the Observatory on 16th September was the only record of the year.

2111. Lesser Broad-bordered Yellow Underwing *Noctua janthe*

Singles were trapped on 22nd July and 25th August,

2117. Autumnal Rustic *Eugnorisma glareosa*

Seven were caught between 22nd August and 12th September.

2118. True Lover's Knot *Lycophotia porphyrea*

Abundant during the summer with a total of 3654 trapped between 3rd June and 30th July. This included an enormous catch of 1959 on 27th July which is the second highest count on the Calf, exceeded only by the 2054 trapped on 31st July 1999.

2120. Ingrailed Clay *Diarsia mendica*

57 were caught in July, between 9th and 30th, with a peak count of 28 on 27th.

2122. Purple Clay *Diarsia brunnea*

Two trapped on 18th July were the only records.

2134. Square-spot Rustic *Xestia xanthographa*

29 were trapped between 19th August and 12th September.

2135. Heath Rustic *Xestia agathina agathina*

One caught on 19th August was followed by four trapped in September, with the last record occurring on 10th.

2139. Red Chestnut *Cerastis rubricosa*

12 were caught between 18th April and 1st May.

2147. Shears *Hada plebeja*

All records occurred in June, with 13 trapped between 1st and 29th.

2158. Pale-shouldered Brocade *Lacanobia thalassina*

One caught on 18th June was the only record.

2160. Bright-line Brown-eye *Lacanobia oleracea*

In total 54 were trapped between 4th June and 22nd July, with a maximum count of 10 on 20th July.

2163. Broom Moth *Melanchra pis*

59 were caught between 1st June and 18th July, well down on the 149 trapped in 2012. Larvae were seen near South Harbour on 29th August.

2167. Pod Lover *Hadena perplexa*

A single on 7th May was the sole record.

2171. Marbled Coronet *Hadena confuse*

Singles were trapped on 3rd, 5th and 25th June.

2173. Lychnis *Hadena bicruris*

Five were caught between 3rd June and 18th July.

2174. Grey *Hadena caesia*

Three singles were trapped on 4th, 5th and 24th June.

2176. Antler Moth *Cerapteryx greminis*

157 were trapped between 11th July and 14th September. The peak catch of 56 was made on 27th July.

2193. Clay *Mythimna farrago*

One caught on 10th July was the only record.

2198. Smoky Wainscot *Mythimna impure*

All occurred in July, with twelve trapped between 16th and 27th.

2232. Black Rustic *Aporophyla nigra*

Only three individuals were recorded, trapped together on 12th October. The lack of dry and calm nights during the autumn certainly did not help.

2255. Feathered Ranunculus *Polymixis lichenea lichenea*

One was caught in 12th September.

2264. Yellow-line Quaker *Agrochola macilenta*

A single was trapped on 12th October. This species has only been recorded infrequently on the Calf in the past with seven previous records over four years (1994, 1996, 2007 and 2011).

2270. Lunar Underwing *Omphaloscelis lunosa*

63 were trapped between 8th September and 16th October.

2273. Pink-barred Sallow *Xanthia togata*

One caught on 12th October was only the third Calf record following singles trapped on 15th September 1996 and 14th September 2007.

2289. Knot Grass *Acronicta rumicis*

After the first on 2nd June, a further 14 were trapped through to the final record on 27th July. Three larvae were found on a willow in the Withy on 25th August and another was in the Back Field on 15th September.

2305. Small Angle Shades *Euplexia lucipara*

The only record was a single trapped in the Withy on 19th July.

2306. Angle Shades *Phlogophora meticulosa*

As usual, records were spread throughout the year. One inside the house on 16th April was the second earliest Calf record (following a single on 26th March 1989). This was followed by two individuals trapped in June, one in July, three in September and four in October, with the final record occurring on 15th October.

2321. Dark Arches *Apamea monoglypha*

276 were trapped between 3rd July and 14th September. The peak count of 70 was made on 27th July.

2330. **Dusky Brocade** *Apamea remissa*
Singles were caught on 9th and 18th July.

2340. **Middle-barred Minor** *Oligia fasciuncula*
After the first three trapped on 18th July, singles were caught on the following two nights.

2342. **Rosy Minor** *Mesoligia literosa*
One caught on 24th August was the only record.

2343. **Common Rustic** *Mesapamea secalis*
After the first on 24th June, the next record did not occur until 27th July. A further six were trapped in August with the final individual caught on 24th.

2350. **Small Wainscot** *Chortodes pygmina*
The first trapped on 13th August was followed by three more singles with the last record on 12th September.

2353. **Flounced Rustic** *Luperina testacea*
32 caught in August (between 18th and 29th) were followed by singles on 8th and 27th September.

2381. **Uncertain** *Hoplodrina alsines*
15 were trapped between 12th and 27th July.

2382. **Rustic** *Hoplodrina blanda*
34 were caught between 9th and 29th July and a single was trapped on 18th August.

2394. **Anomalous** *Stilbia anomala*
One trapped on 8th September was the only record.

2434. **Burnished Brass** *Diachrysia chrysitis*
Only four were trapped; three on 16th and one on 18th July.

2441. **Silver Y** *Autographa gamma*
The first of the year trapped on 18th June was followed by five day records that month. A single was trapped in July and 10 were seen during the day in August. There was no significant influx during the autumn; 15 on 28th September and 10 on 12th October were the peak counts. The final record occurred on 16th October.

2450. **Spectacle** *Abrostola tripartite*
14 were trapped between 24th May and 25th July.

2469. **Herald** *Scoliopteryx libatrix*
One trapped on 4th June was the only record.

2474. **Straw Dot** *Rivula sericealis*

Seven were recorded between 12th and 29th July, with five trapped and two seen during the day. These were the first records since 2007.

2477. **Snout** *Hypena proboscidalis*

A good series of records occurred in July with 24 trapped between 20th and 29th, nearly all in the back garden. One caught on 18th August was the final record.

Grey Seal Behaviour, Pup Census and Photo Identification Study: Calf of Man

Final Report 2013

Report by: Eleanor Stone, Manx Wildlife Trust

With thanks to the Calf wardens (Daniel Reynoldson and Will Hayward) and field volunteers (Fiona Shimmin, Anna Bunney and Rebecca Crow)

Key Findings

- 52 pups at 13 different sites.
- Predominant behaviour at sites was resting, with suckling observed in 19.3% of intervals.
- Individual variation was quantified in the mothers' investment in their pups, revealing personality differences across the colony.
- 32 females and 6 males were fully identified.
- 24 females and 3 males have been seen in previous years.

1.0 Introduction

Grey seal monitoring during the pupping season has again taken place in 2013, covering a good percentage of the pupping season. Volunteer availability meant that less of the season was covered compared with previous years. Although there were considerably less general behavioural observations, the pup count was still considered to be adequately representative. The detailed study was conducted between the 15th October and the 1st November 2013, with assistance before and after from the Calf wardens. The project was again carried out under licence from the Isle of Man Government (Department of Environment, Food & Agriculture, licence number WLA/G014/13).

2.0 Methods

Methodology followed was the same as in 2012 (see 2010/2011/2012 reports for methodology). The pup count was carried out on an ad hoc basis while the wardens were carrying out other duties. When the volunteer observers arrived, effort was increased with almost daily walks to the main pupping sites. Pup presence was recorded and pups were assigned to one of 5 developmental stages, to ensure that pups weren't double counted. Behavioural observations were carried out, with the majority of effort concentrated at 3 sites, Grant's Harbour, the Puddle and Cow Harbour. Photo identification of females, males and fully moulted pups was carried out wherever possible.

An additional behavioural study was initiated in 2012, looking at the variation in the behaviour of individual mothers. This was continued in 2013, although the element of the study looking at the reactions of mothers to other seals was dropped, as it was hard to conduct and the resulting sample size was too small to give meaningful results. The study aims to give an indication of the differing personalities among the population, which in turn may affect a population's ability to respond to rapid environmental change (Twiss et al, 2012). The methods followed were the same as in 2012, but no responses to other seals was recorded.

3.0 Results

3.1 Pup Census 52 pups were recorded on the Calf in 2013, at 13 different sites. Only 4 dead pups were recorded, making the pre-weaning mortality rate 7.7%. This is similar to previous years on the Calf, as well as being relatively low compared to general grey seal pup mortality (<http://www.iucnredlist.org/details/9660/0>) This is the highest number of pups recorded in one season (previous range: 27*-41. *=2009 was only a short pilot study). It is also the highest number of sites recorded in one year (previous range: 9-12).

The distribution of pups can be seen in Figure 3.1.1 below. This map also has the distribution of pups in previous years. Distribution is broadly similar, with a clear high density of pups at Cow & Grant's harbours once again. There were an increased number of pups at both the Puddle and South Harbour in 2013. However, four of the pups at the Puddle were recorded late in the season on an extra visit to the Calf. In previous years, although the wardens were still present at this time, they may have missed these late born pups.

3.2 Behaviour

Behavioural observations were carried out for a total of 58.25 hours, over 15 days. This is less than in previous years due to fewer volunteers being available for the study. The breakdown of time spent at each site is shown in the table below:

Site	Hours Observation
Grant's Harbour	24
The Puddle	15.75
Cow Harbour	14.5
The Leodan	2
South Harbour	2

Figure 3.1.1: Distribution of pups, 2009-2013 (2013 pup numbers in red)

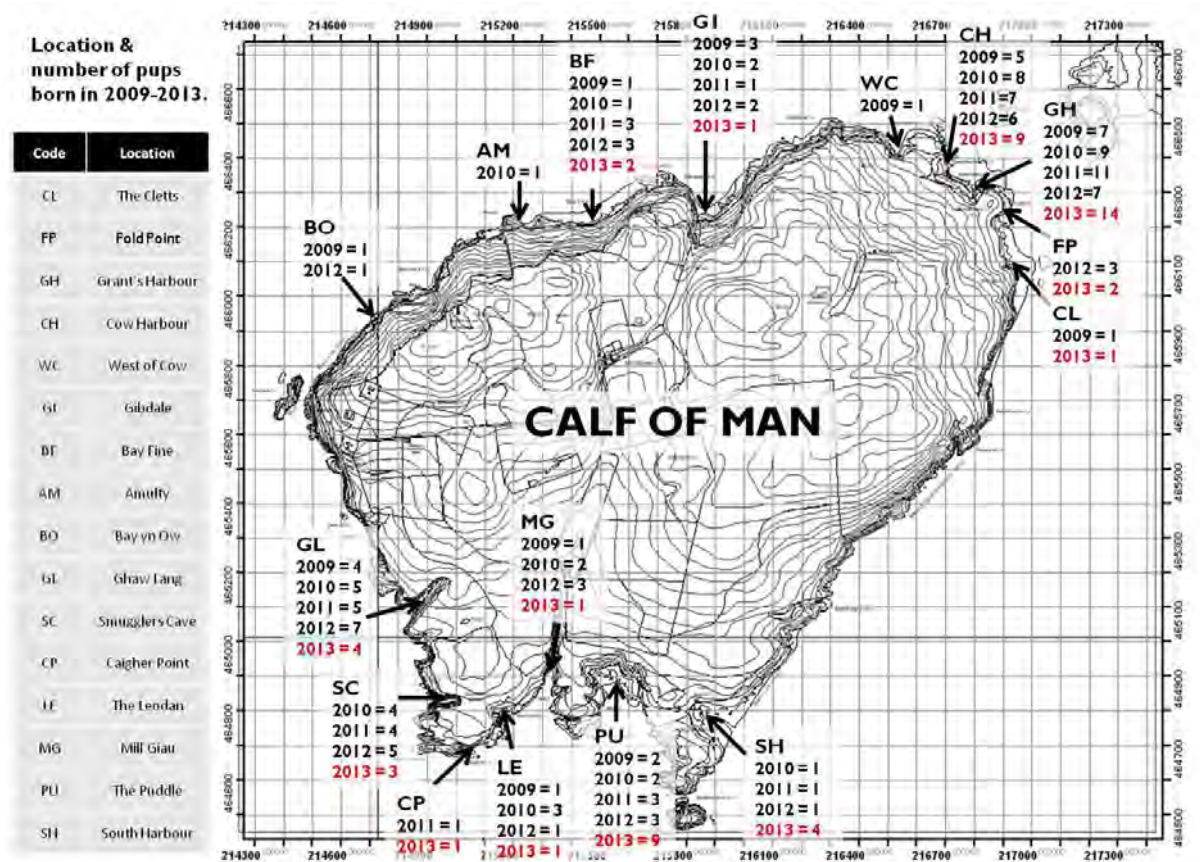


Figure 3.2.1 below shows the breakdown of the occurrence of all behaviours, males and females combined. This represents the number of intervals that were positive for that behaviour, rather than the length of time spent engaged in that behaviour. It can be seen that once again, the most commonly observed behaviour was resting, both on land and in the water. Suckling was observed in 19.3% of intervals. This is more comparable with the 2010 and 2011 figures, rather than 2012 when it dropped to 15%.

Figure 3.2.1: Occurrence of each behaviour, males and females combined.

H = hauled, W = in the water, L-S = moving from land to sea, S-L = moving from sea to land

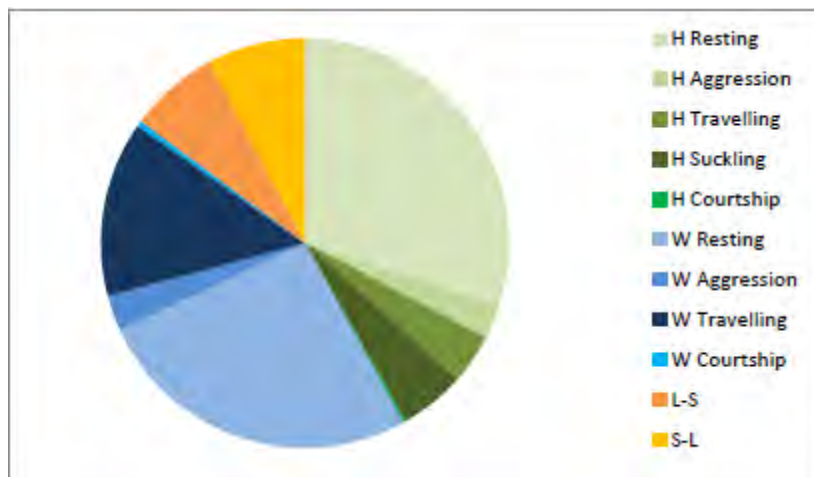
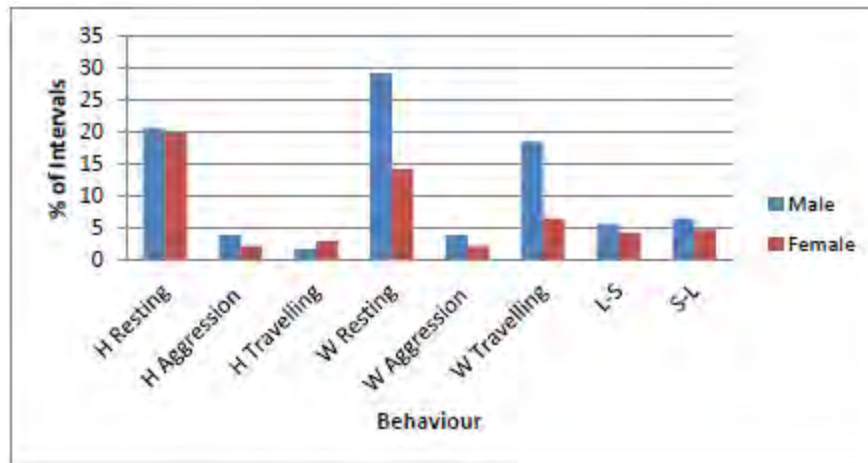


Figure 3.2.2 below shows the breakdown between males and females for the more commonly observed behaviours. The average number of males present in each interval was 1.2 and the average number of females was 4.4. Using these as correction factors makes the results for males/females more comparable. These behavioural observation patterns are very comparable with those of previous years.

Figure 3.2.2: Breakdown by males and females of the more commonly seen behaviours.
H = hauled, W = in the water, L-S = moving from land to sea, S-L = moving from sea to land



Pup behaviour was not quantified, but, as in previous years, pups showed a variety of behaviours, especially as they got older. There was also individual variation in the amount pups moved around and went in the water, partly dictated by their physical positions on the beach/rocks.

3.4 Mother Focal Study

Behavioural observations of individual mothers were recorded for a total of 178 hours (several mothers could be recorded simultaneously, hence the higher observation time). The breakdown of time and location of observations is shown in the table below - mothers observed in 2012 are shown in bold:

Location	Mother ID	Hours observation
Grant's Harbour	2	10.25
	5	8.3
	7	24
	8	13.25
	74	4.75
	102	18
	101	3
Cow Harbour	14	13.4
	73	1.1
	79	5.1
	93	2.1
	92	3
	94	4.1
Puddle	41	12.4
	49	15
	103	12
	104	12.9
South Harbour	99	2
The Leodan	39	2.1
Various	Unknowns	11.3

10 females which were observed for over 10 hours, or those which were focussed on in the 2012 study were included for further analysis. However, all mothers are included for the purposes of the 'average' calculations.

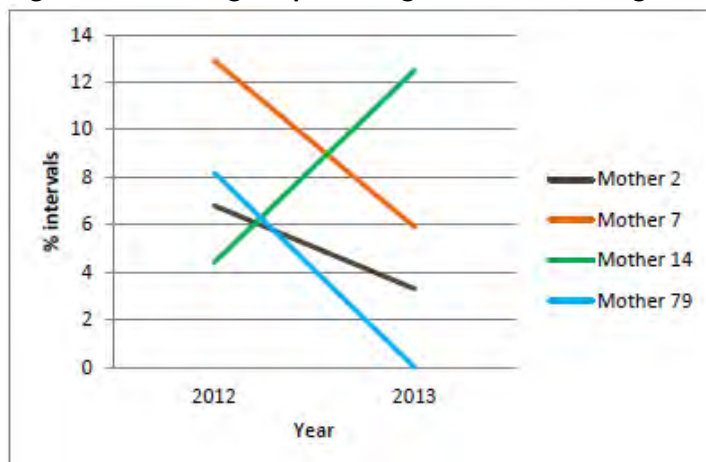
Suckling

At the start of each 5-minute interval, whether the mother was suckling the pup or not was recorded. The average percentage of 5-minute intervals in which suckling was observed was 4.6%. This is lower than the percentage recorded in the broader behavioural study, but is only thought to be due to methodological differences. It is also lower than the figure recorded in the 2012 mother focal study (6.5%). For the ten key mothers, the percentage of intervals suckling (in increasing order) was as below:

Mother ID	% intervals suckling	Number of known pups	Location
79	0	2	Cow Harbour
104	1.9	1	The Puddle
102	2.3	1	Grants Harbour
41	2.7	2	The Puddle
2	3.3	5	Grants Harbour
49	4.4	2	The Puddle
7	5.9	5	Grants Harbour
8	6.9	3	Grants Harbour
102	9	1	The Puddle
14	12.5	4	Cow Harbour

As was seen in 2012, there is individual variation in the amount of time spent suckling the pup. This does not seem to correlate with the number of pups the mother is known to have had previously or the location. Nevertheless, all these pups survived and were successfully weaned. A comparison of percentage intervals suckling in 2012 and 2013 for the 4 mothers observed in both years is seen in Figure 3.4.1. This shows that all but one of the mothers was observed spending considerably less time suckling. However, as all the pups were successfully weaned, this does not appear to be significant. The observations are clearly only carried out for a limited sample of time, so it could be that suckling was not observed by chance, or it could represent different mothers' abilities or behavioural strategies.

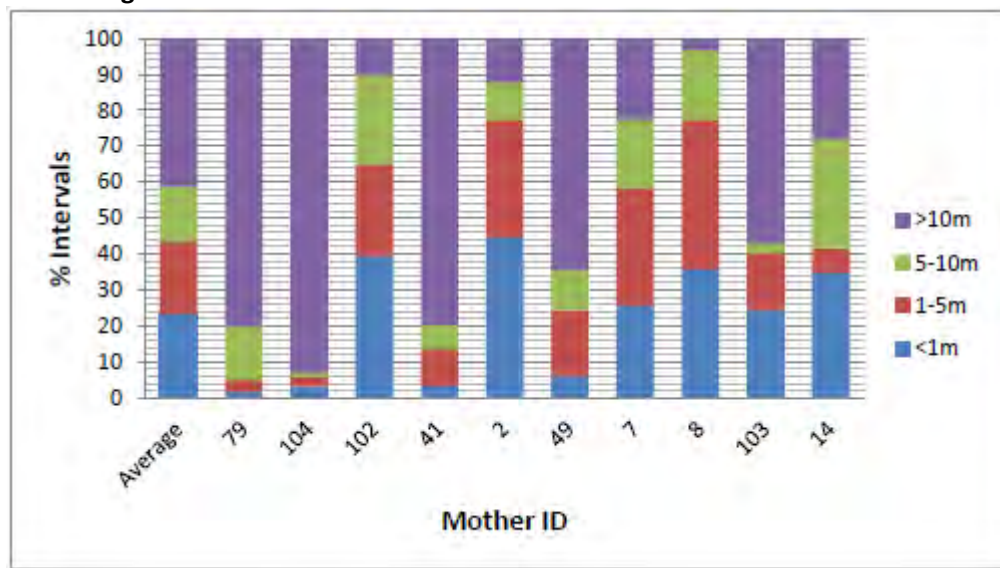
Figure 3.4.1: Change in percentage intervals suckling for the 4 mothers observed in both seasons



Distance from Pup

The maternal personalities, investment and behavioural strategies can also be looked at by recording the distance from her pup. At the start of each 5-minute interval, the distance a mother was from her pup was recorded, in 4 distance bands. The percentage of intervals at each distance band for the ten focal mothers is shown in Figure 3.4.2 below, along with the average for all the mothers. This has been ordered as in the suckling table above.

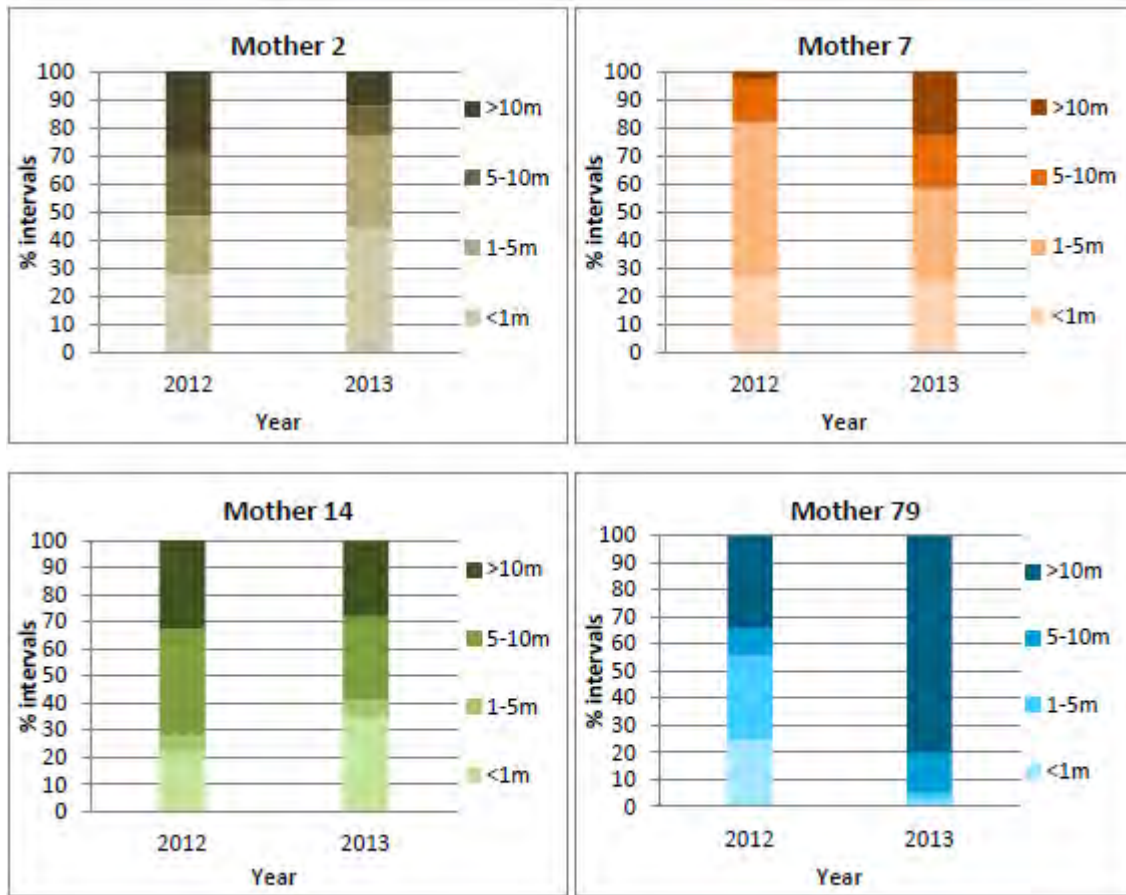
Figure 3.4.2: Percentage of occurrence at different distance bands for the key mothers, alongside the average for all mothers



Although for a mother to be suckling, she would clearly have to be within 1 metre of her pup, this graph shows that in fact most of the mothers spent considerably more time than just suckling at this close proximity, with the exception of 79, 104 and 41. There is, however, considerable variation between the mothers, again possibly reflecting different personalities and levels of vigilance.

Figure 3.4.3 below shows the distance bands for the 4 mothers observed in both years, with 2012 and 2013 results alongside each other. These results show that each of the mothers showed slightly different patterns in the two different years, although this was most striking for mother 79. Mother 79 was the only mother who had a pup in a different location in 2013 to where she had it in 2012. Although the locations (Grant's Harbour in 2012 and Cow Harbour in 2013) are very close geographically, they do differ physically, with Grant's Harbour being a connected series of small gullies and Cow Harbour a small open beach. This may explain the difference in proximity to her pup. However, the sample size for mother 79 was only small in 2013, so this result should be treated with caution. It is not known how mother or pup health differed between the years.

Figure 3.4.3: Comparison between years of distance bands for 4 mothers



3.5 Photo Identification

In 2013, 32 females and 6 males were identified fully, i.e from good quality photos of both the left and right side of the head. Additionally, a further 8 females were identified, either from poorer quality photos or from photos of only one side. The total number of individuals in the catalogue is now:

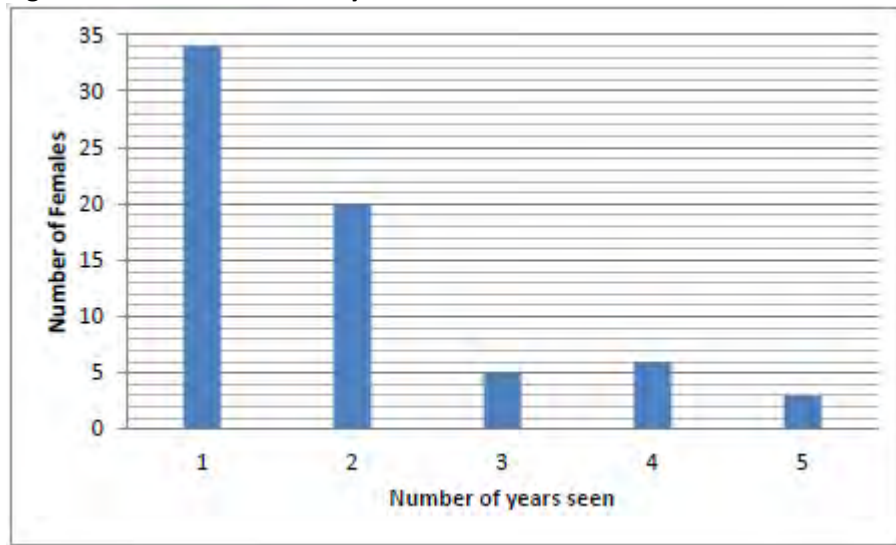
Females (full ID) = 68

Left/Right females = 36

Males = 18

Of the females identified, 26 had pups in 2013. 24 females identified had been seen in previous years – 2 of which have now had a pup in 5 different seasons. There is also 1 male who has been identified 5 years running and 3 males which have been seen in previous years. Figure 3.5.1 shows the number of repeat identifications of females across different years. This shows that there is clear site fidelity to the Calf, with many females seen in multiple years. However, there are still a number of females which have only been seen once, indicating that there are still new individuals in the population being identified or represents a degree of emigration/immigration.

Figure 3.5.1: The number of years in which females have been seen



Returning females generally had pups in a close location to previous years – there is an apparent ‘north south divide’ between the sites in the north (Cow & Grant’s harbours), and the sites on the south west coast.

4.0 Potential Disturbance

The study was carried out according to the terms of the licence, in order to minimise disturbance. Although it was noticed that females in particular showed a reaction to the presence of the observer, typically they reverted to their original behaviour once the observer had settled into position. There was also considerable individual variation in the level of response shown towards the observer – another indication of different personalities within the colony. Over the length of the study, seals typically became habituated to the presence of the observer.

At Grant’s Harbour two pups travelled quite far inland in 2013. One pup was commonly observed on the path immediately coming up from the harbour, whereas another was briefly seen on the higher path back towards Cow Harbour. It is not known how this pup got to or from this location! When this occurred, the observers maintained a greater distance from the pups, who did not appear disturbed by their presence.

There were three pups in South Harbour in 2013. In previous years there has only been one. The three pups were born spanning the length of the pupping season and all would have been subject to a small amount of boat traffic coming in and out of the harbour. One pup in particular was quite near the jetty, however it did not react strongly to the presence of people or the boat. The mother was also noticeably calm and would only get agitated if anyone came very close.

At least two young pups and a stage 5 pup were seen by the slipway and store at Cow Harbour. Although the rough weather probably prevented it from occurring, these pups would potentially be at risk from boats coming into the harbour. If this pattern at both South and Cow Harbours continues, it may be necessary to warn boat visitors of the potential presence of pups and encourage a safe distance to be maintained.

5.0 Conclusions

The grey seal pup study was again carried out very successfully during the 2013 season and the results showed similarities to previous year's results. The total number of pups, at 52, was the highest yet recorded. Most of the same locations were used for pupping.

Behavioural observations were also fairly consistent with previous years. The continuation of the focal mother behaviour study has revealed interesting new patterns as to the individual personalities that seals have. These different personalities not only highlight the complex and intelligent society that seals live in, but may also confer differing levels of ability to adapt to a rapidly changing environment. Continuing this study in future years will not only refine the differences/similarities between individuals, but should also show whether individuals show plasticity in their behaviour over time.

Photo identification is proving very useful for studying site fidelity to the Calf. Each year more females are being added to the catalogue, indicating that we still haven't encountered all the different seals that use the Calf for pupping. However, the increasing number of seals recognised as returning to the Calf indicates it continues to be a suitable pupping location for this population. It has not yet been possible to track any of the seals beyond the Calf, but potentially comparisons with other photo ID catalogues may also show up more wide scale movements. Long term photo ID studies will enable a more accurate estimate of the number of grey seals utilising the Calf, as well as a greater understanding of life history traits such as longevity and fecundity. As the Calf has the highest density of pups around the Isle of Man, long term study should also continue to ensure this protected species is monitored during this crucial life stage.

1 Twiss SD, Cairns C, Culloch RM, Richards SA, Pomeroy PP (2012) Variation in Female Grey Seal (*Halichoerus grypus*) Reproductive Performance Correlates to Proactive-Reactive Behavioural Types. PLoS ONE 7(11): e49598. doi:10.1371/journal.pone.0049598



Seal Pup (Photo: Will Hayward)



Common Seal (Photo: Hannah Mitchell)

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ISSN 0962 4325
ISBN 978-0-901106-86-5



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