Wardens ringing report for Landsort Bird Observatory 2016

Prepared by Chris Sharpe & Kay Collister on behalf of Landsort Bird Observatory

Introduction

Prior to our commencing work, ringing took place on five dates in late March/early April. After arriving on the island on the 3^{rd} April the following day was spent putting up the rest of the nets at Bredmar, with our ringing starting on the 5^{th} April and continuing until the 3^{rd} November.

In addition to operating the nets at Bredmar, effort was applied to a range of other tasks associated with running the Observatory:

- Daily entry of ringing data on Fågel3 and monthly submission to Ringing Central;
- Daily entry of captures and notable sightings on Artportalan and writing of daily diary;
- Daily update of birds ringed and weekly summary put on noticeboard at end of lane;
- Check 217 nest boxes in spring and ring all young 238 young ringed;
- Empty 42 nest boxes of old material in late autumn (plan to empty all was not achieved due to leaving early);
- Implement and maintain an agreed system for standardised ringing on the BMAR site;
- Collection of over 400 ticks from birds on behalf of Uppsala University;
- Collection of faecal samples from Blåhake, again on behalf of Uppsala University;
- Keep net lanes, pathways and grass in front of the Observatory trimmed;
- Repair and replace boardwalks at Bredmar;
- Trim net rides in spring at SUDD, done again in late summer by volunteers;
- Re-build bird feeding boxes;
- Assist in putting 7 nets up at SUDD;
- Clean and repaint the concrete outer walls of the Observatory;
- Design and help build the toilet and shower room;
- Produce new sign for the outside wall of the Observatory;
- Routine cleaning of Observatory building;
- Routine cleaning of bird bags;
- Erect internal walls in 'lab', build storage shelves in workshop, tidy and store spare timber;
- Remove most old timber from around the BMAR nets and store at Observatory ready for disposal, some burnt but some remains;
- Clear Observatory of old material in spring and autumn for disposal on 'rubbish boat';
- Maintain cash book, showing income/expenditure and reconciling this to cash in tin;
- Ensuring members staying overnight were up to date with their membership fee;
- Provision of over 55 drop-in/pre-booked guided talks and lectures to over 430 people;
- Assist in the preparation of a significant funding bid to the Leader Project;
- Develop contacts and possible funding opportunities with island residents and other contacts;
- Provision of written reports to the Board on a range of activities such as: guided talks, membership, nest box monitoring and standardised ringing.

Thanks are due to the many people who provided help, advice, friendship and support throughout the year. These include the members of the Board, in particular Pelle Johansson and Liam Martin, who were regular sources of support and guidance throughout our stay.

Many members helped with a range of tasks through the year, too many to mention and run the risk of missing someone out accidently, but the tasks include; emptying nest boxes before the season started, repairing boardwalks/ canopy net ropes, trimming net rides and chain-sawing trees, tidying the workshop, oiling external seats – the many tasks that are needed to run the facility! Our job would have been harder without your help.

Island residents played a significant role in helping to make our job as Wardens easier and our personal thanks go to each of them for their support. Everyone we met appreciated the efforts being made to improve the work and status of the Observatory. Particular mention should be made of Claes Hultling and Per Lind who devoted their time and expertise in helping to develop contacts for the future. Thanks also to Ann Stuxberg for steering an increasing number of her hostel guests to us for guided talks.

Thanks also to Thord Fransson and Thomas Wenninger at 'Ringing Central' for their guidance during the season and in particular for their whole-hearted support of the introduction of the Standardised ringing process.

We would like to thank two people in particular. Firstly, Janne Ohlsson, who stayed at the Observatory frequently throughout the season. It was always a pleasure to receive a text that he was 'on the ferry' and he did more than he knows to add to the pleasure we derived from our time there.

Finally, it would be unthinkable not to give a particular thanks to Tore Jakobsson. Without his support and friendship our stay would have been so much harder and much less enjoyable or filled with humour! From helping with the logistics of getting food, provision of salmon, sorting out computer issues, making coffee when needed through to our early warning system for getting away before the snow, we really would have been lost without him. Thanks Tore, a true friend to both of us and to the Observatory.

Overall summary

Ringing commenced at BMAR on the 26th March and ceased on 3rd November and, together with the totals from SUDD, produced 11,631 new birds of 86 species/ sub-species (annual average 7,113 of 80 species). This is the second highest total ever (11,901 in 2014) and was obtained through 206 days ringing (annual average 118), representing the most consistent level of ringing effort that has been achieved since the Observatory was formed in 1988.

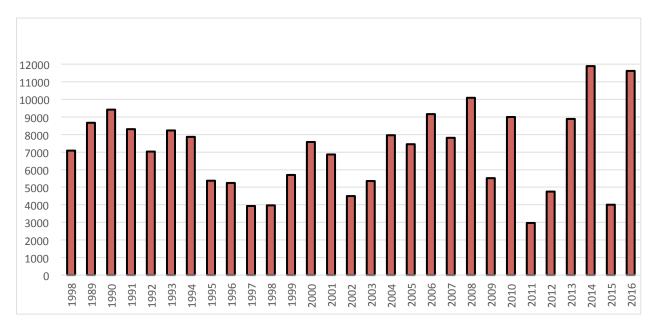


Chart I - Annual totals of new birds 1988-2016

Once regular ringing started at BMAR on the 5th April there were only 12 days that ringing was not possible – all due to weather – until ringing ceased on the 3rd November. **Chart 2** indicates the percentage of days netting took place in 2016 compared to the period 1988-2015; figures shown by half-month.

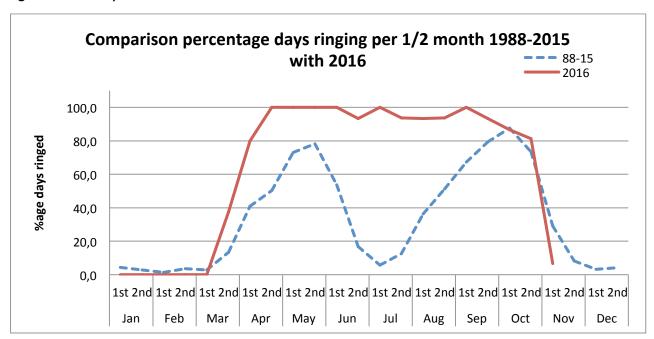


Chart 2 - Percentage of days ringing 2016 compared to 1988-2015

The 'spring' (taken as being up to the end of June) was remarkable for a period of very good weather in May, resulting in many spring migrants moving over the island without stopping, giving a slightly below average capture rate for the month, despite netting being possible on every day and with most nets operated. Despite a poor May the first half of the year was the 7th best on record with 2,640 new birds caught, compared to an average since 1988 of just 1,968.

The second half of the year started well with July, a month when ringing has been sporadic or non-existent in most previous years, being the best on record, with captures in August-October being well above their respective averages. Overall 8,991 birds were caught in the

second half of the year; the 2nd best year on record and comparing favourably with the average since 1988 of 5,095. **Chart 3** clearly indicates that captures in the first half of the year were consistently below average whereas those for the months July to October were consistently higher than average.

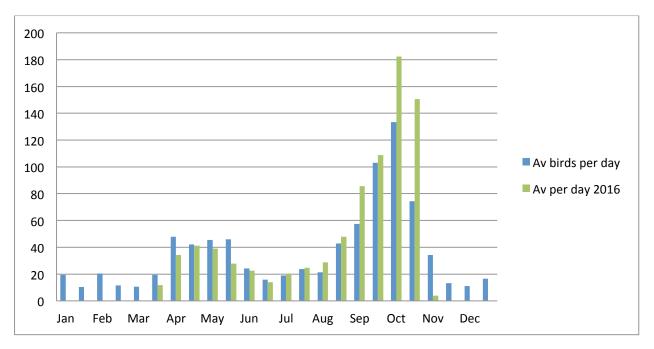


Chart 3 - Average birds caught per half month 2016 compared to 1988-2015

Appendix A provides detail of numbers of each species caught compared to previous years, but at this stage it is worth noting that of the 170 species/ sub-species caught since 1988 record year catches were achieved in 2016 for 21 of them (12%) and equalled for a further five species. No new species for the Observatory were caught in 2016 but there were two new sub-species; Blåhake *Luscinia svecica cyanecula* and Stjärtmes *Aegithalos caudatus europaeus*.

Ringing at SUDD took place on just seven dates in September and October, producing 306 birds, an average of 44 per day compared to the year average of 55 per day at BMAR.

Appendix B indicates the overall numbers caught per species in 2016, shown in descending numbers caught.

Appendix C shows the species for which 2016 represents a record year.

Monthly summaries

Table I summarises a range of information for each month, including the amount of ringing. Note that March data is calculated based on the season starting on the 26th (the first day that ringing took place) and that in November the data are based on the season ending on the 3rd. Figures shown in the table deal only with BMAR, with data for SUDD included within the following summary for each month.

Month	Birds	Species/	Days ringing		Days	Netline	Birds per	Av. nets	Av. Ringing
		sub-sp	No	%	missed	Net Hrs	hour	per day	hrs per day
March	47	13	4	66.7	2	12	3.9	1	2
April	1028	38	27	90	3	168	6.1	28	6.2
May	1031	46	31	100	0	237	4.4	28	7.6
June	534	47	29	97	1	179	3	27	6.2
July	676	46	30	97	1	206	3.3	27	6.8
August	1119	41	29	94	2	193	58	22	6.6
September	2682	42	29	97	1	202	13.8	26	6.5
October	4148	45	26	84	5	169	24.6	14	5.6
November	60	14	1	33	2	4.8	12.6	13	4.8
Overall	11325	86	206	95	17	1371	8.3	21	5.8

Table I Bredmar - Summary of birds per month compared to ringing effort

March

Maximum of two nets opened on four occasions between 26th and 31st. Notable was a female Svarthätta caught on the 28th, the earliest capture date for the species since the Observatory was formed in 1988.

April

After 2 nets were opened on the 2nd, for 3.5 hours with seven birds of five species caught, all 30 nets were available for operation by the 5th. Overall 1,028 new birds were trapped with captures of 50+ on 6 days and 100+ (151) on the 17th.

Highlights included first spring returning Göktyta and Lövsångare (both on 17th), Sydnäktergal (21st), a splendid male Halsbandsflugsnappare (29th) and a Svart rödstjärt on the 30th.

May

From May Ist a daily record was kept of wind conditions with SE-SW light to moderate winds prevailing until the I0th before a week of NE winds from IIth to I7th; mainly light to moderate but strong on the I6th. A week of light to moderate S winds followed before moving to the NE on the 24th with NE to NW moderate to occasionally very strong winds until the month end.

A total of 1,031 new birds of 46 species caught. Despite netting every day capture rates were low, only the 14th best May for captures since 1988, with just four days of 50+ birds.

Notable birds were few but included the Observatories first Blåhake of the sub-species cyanecula (8th), a female Halsbandsflugsnappare (22nd) and a Busksångare on the 28th.

June

NE-NW winds, mainly moderate in strength prevailed from the Ist until the I2th, followed by moderate to strong, mainly SW winds until the 24th, with winds varying from E, through S to W and from light to strong until the month end. The I8th had heavy rain all day and marked the first day since 5th April that no ringing was possible.

A total of 534 new birds of 47 species were caught, the second highest June total. There was just one day (2^{nd}) with 50+ birds ringed, including young in nest boxes.

The most notable captures were on 4th, with a male Gulhämpling caught followed the day after by a female, the 2nd and 3rd caught at the Obs. The only Höksångare of the year was caught on the 6th, followed by the only Lundsångare on the 8th, with the Observatories second ever Större Korsnäbb trapped on the 13th.

July

Moderate to strong SW-NW winds dominated the month until the 19th with the wind being from the E on the 20th before becoming SE-SW, mainly moderate, from the 23rd until the 28th with W-NW winds for the last three days.

676 new birds of 46 species were caught in the month, the highest July total ever achieved, though it should be noted that this is a month where little ringing has historically taken place. There were no 50+ days in the month. July marked the start of a Standardised operation of the nets at Bredmar, with 18 nets classed as 'Standard' and 12 as 'Non-standard'.

Notable were the second Busksångare of the year (11th), the first (and only) Husvala of the year (24th) and three Gröngöling; two on the 29th and another on the 30th.

August

Strong W-SW winds dominated during the first two weeks of the month, remaining strong but from the N-NW for a few day, after which there was a settled period of eight days with light S winds until the 26th before stronger winds from all points of the compass typified the final five days of the month.

1,119 new birds of 41 species represented the second highest August total for the Observatory. There were nine 50+ days and one of over 100 (131 on the 17th).

Notable records included the only Gulärla of the year (14th), two Grässhoppsångare (14th and 29th) and a Tornfalk on the 15th.

September

Moderate to Strong S-SW winds for the first 15 days were followed by nine days of predominately NE slight to moderate winds before moderate to very strong SW winds settled in on the 25th, remaining until the end of the month.

At BMAR 2,628 new birds of 42 species were caught. At SUDD seven nets were available for use from the IIth and were operated on three occasions in the month giving I26 new birds of I5 species with all seven nets operated each day for an average of 5.5 hours per day and giving a capture rate of 7.6 birds per hour.

Overall 2,808 new birds of 42 species were caught, the third highest September total achieved. There were eleven 50+ days, ten of 100+ and two of 200+ with 250 on the 14th.

A late Blåhake (15th) was of note with the first of the months eight Taigasångare caught on the same day with a Stenknäck (23rd) also being noteworthy.

October

Strong to very strong NE winds from the 2nd until the 14th gave way to E-SW winds until the 24th but remaining strong to very strong throughout. In fact the strength of the wind remained that way for the month but from the 26th varied between SW and NW. Despite (or perhaps because of) the strong winds a total of 4,148 new birds 45 species were caught at BMAR. The 31st was the only day it was calm enough to open all 30 nets, with the five reed nets only opened on five days of the month.

At SUDD ringing took place on just four dates producing 180 new birds of 16 species, an average of 6 nets operated per day for an average of 4.6 hours and a capture rate of 9.7 per hour.

Overall, 4,328 birds of 45 species were trapped, the third highest October catch behind only 2013 and 2014. Despite the high winds and limited number of nets used high daily capture rates were achieved, with; two 50+, thirteen 100+, two 200+, two 300+ and two 400+ days, the highest being 427 on the 14th.

There were a number of notable captures starting with a Dvärgsparv (2nd) followed by the ninth Taigasångare of the year (4th) and a Hornuggla on the 18th. After a quieter period an influx of Sidensvans resulted in seven caught on the 29th, but it was the final day of the month that produced the best birds. Three each of Vinterhämpling and Skäggmes were more than matched by an extremely late Sydnäktergal.

November

Gale force winds on the Ist and 2nd meant that no ringing was possible. The ringing year then finished with an anti-climax. Ringing was planned to continue until the I3th of the month, but the imminent arrival of heavy snow resulted in a last minute change of plans with our departing the island at 0630 on the 4th, having made the decision to leave at I I 30 on the 3rd! Between that time and leaving, all bird bags were washed and dried, all 30 nets at BMAR removed and stored, Observatory cleaned from end to end, Lab cleaned, travel plans changed and packed!

Sixty new birds of 14 species were caught.

Systematic summary of birds ringed on Landsort in 2016

For each species the Swedish, English and scientific names are given. For the purpose of this report 'spring' is taken as the period 26^{th} March to 30^{th} June, while 'autumn' relates to the period 1^{st} July to 3^{rd} November.

An '*' beside the species name indicates that all the years records for that species are referred to in the text. Figures after the scientific name indicate the number caught in 2016 with the average for the period 1988-2015 shown in brackets after. Note that for species where numbers caught is low, comparisons are not as meaningful as for species where higher annual numbers are obtained.

Sparvhök Sparrowhawk (Accipiter nisus) 9(7.2)

Just nine birds in the year; significantly lower than the best year of 18 (2014). After the first on the 17^{th} August there were a further three in the month, unusually all four were female birds. Despite decent numbers passing through the island there were only five caught in September, starting with one on the 3^{rd} and the final bird being on the 24^{th} .

*Tornfalk Kestrel (Falco tinnunculus) I (0.2)

One bird, a female, was trapped on the 15th August.

*Ringduva Woodpigeon (Columba palumbus) 2(0.2)

After one on 30th June a second was trapped in SUDD on 14th October, but ringed on Bredmar rings and released at the Observatory.

*Gök Cuckoo (Cuculus canorus) 4(0.4)

A record year for the species, starting with one on 22nd July, a second on 13th August and singles on consecutive days on 4th and 5th September.

*Hornuggla Long-eared Owl (Asio otus) I (0.5)

The first bird since 2011 was trapped in the first south net on 18th October.

Göktyta Wryneck (Jynx torquilla) 23(5.2)

A record year for the species. After singles on the 17^{th} and 30^{th} April there were six in the first seven days of May before the last bird of that month on the 14^{th} . Following a gap that included the whole of June there were 14 trapped in July. Thirteen of these were between the 3^{rd} and 20^{th} , with the three caught on the 3^{rd} and 4^{th} not yet fully grown. The final bird of the year was on the 29^{th} .

*Gröngöling Green Woodpecker (Picus viridis) 3(0.3)

A record year for the species. Birds heard and seen during July raised hopes of eventually finding one in the nets, but the 29th July excelled with two in the canopy net at the same time. The following day the third bird was caught, again in the canopy net. Thereafter one or more birds were seen/ heard, including one with a ring on it.

Större hackspett Great Spotted Woodpecker (*Dendrocopos major*) 19(7.3) After the first on 9th April, the month produced eleven more birds, including three on the 13th, with the final spring bird on 3rd May. After a long gap a juvenile

was trapped on the 24th July followed by a further gap with just three birds in September and two in October, the last being on the 28th.

*Mindre hackspett Lesser Spotted Woodpecker (Dendrocopos minor) 2(1.7)
Only two birds for the year, both juveniles; with the first on 18th July and the second on the 13th October.

Ladusvala Barn Swallow (*Hirundo rustica*) 14(7.4)
After the first of the year on the 24th May there were five caught on 4 dates in June and seven on five dates in July before the last bird of the year on the 31st August, the only bird for that month.

*Hussvala House Martin (Delichon urbicum) I(12.4)
A single on the 24th July was the only bird of the year.

TrädpiplärkaTree Pipit

(Anthus trivialis)

12(10.3)

After a single on the 15th May; the only spring record, two birds were caught on the 15th August, with captures on seven further dates before the last two were trapped on the 12th September.

Ängspiplärka Meadow Pipit (Anthus pratensis) 5(9.3)

The 8th May produced the only spring record with the first of only four autumn records on the 9th July (earliest date for an autumn bird), two in September and the final bird on the 16th October.

*Gulärla Yellow Wagtail (Motacilla flava) I (0.6)
A single bird on the 14th August was the only one of the year.

Sädesärla White Wagtail (Motacilla alba) 60(26.5)
A single on the 9th April was the first for the year and the earliest date on record for a spring capture, with five more birds in the month, five in May, 16 in June and 26 in July before numbers declined to just five in August and two in September, the last being on the 24th.

*Sidensvans Waxwing (Bombycilla garrulus) 39(15.9)
Caught on just three dates in late October: seven (27th), two (30th) and 30
(31st). Many birds were present on the island in the latter part of the month with an estimated 500+ on the 4th November.

Gärdsmyg Wren (*Troglodytes troglodytes*) 300(102.0) A record year for the species: with 243 in 2000 being the best prior to that. Starting with four birds on the 5th April there were a total of 38 birds in the spring period followed by low numbers throughout July and August before a notable increase from the second half of September through October, with 231 caught in this period before the final three on the year on the 3rd November.

Järnsparv Dunnock (*Prunella modularis*) 73(56.5)

Three on the 30th March were the first for the year, followed by good numbers in April (43) before the last spring bird on the 1st May. After a long gap the first autumn bird was trapped on the 14th September with a total of 13 in that month and a further 13 in October including the last bird of the year on the 30th.

Rödhake Robin (Erithacus rubecula) 2142(959.2)

After five birds in March, the 5th April produced 27 birds, suggesting that spring migration was already underway. Overall numbers of 393 in April showed a peak after the middle of the month with a maximum spring day capture of 72 on the 17th. After the first two weeks of May numbers declined to give just 13 in the last two weeks, 15 in June and 21 in July. Autumn migration started slowly from mid-August before 872 in September and 611 in October, including 167 on the 20th. 2016 was a record year for the species, passing the previous best year of 1,837 in 2014.

Näktergal Thrush Nightingale (*Luscinia luscinia*) 28(19.5) First of the year was on 10th May, with 17 for the month including three on the 12th. There were five in June, the last being on the 21st followed by a gap until just two in July (19th and 21st) and four in August; the last of the year being on the 15th.

*Sydnäktergal Nightingale (Luscinia megarhynchos) 2(0.1)
Only the fourth and fifth records for the Observatory: after two in 1990 and one in 2003. First of the year was caught on 21st April with the second bird on the extremely late date of 31st October.

Blåhake Bluethroat (Luscinia svecica) 13(30.5)

The first four birds were caught on the 7th May, with a male of the sub-species cyanecula trapped the following day; the first for the Observatory. May produced eleven of the years birds, all within the period 7th to 16th, with only two more trapped; one on 25th June and the final one on 15th September. Faecal samples were collected from ten individuals under an agreement with Uppsala University.

*Svart rödstjärt Black Redstart (Phoenicurus ochruros) I (0.9)
One on 30th April was the only bird of the year.

Rödstjärt Redstart (*Phoenicurus* phoenicurus) 94(101.6)

The first of just two April records was on the 20th, May giving a peak of spring passage with 44 before numbers declined rapidly to give just three in June. Autumn passage produced only 45 birds; 12 in July, 16 in August and 17 in the first half of September, the last being on the 10th.

Buskskvätta Whinchat (Saxicola rubetra) 7(16.5)

Only seven birds for the year, the first being on the 11th May, one of three for the month and the only spring birds. The first returning bird was on the last day of July, followed by one on 17^{th} August with singles on the 3^{rd} and 5^{th} September being the last of the year.

Stenskvätta Wheatear (Oenanthe oenanthe) 32(16.9)

Two on the I7th April were the earliest ever trapped at the Observatory with a further six birds that month before seven in May, eight in June and nine in July, the last of the year being on the 29th of that month.

Koltrast Blackbird (*Turdus merula*) 184(100.5)

A record year for the species: passing the 2009 total of 165. After two on the 26th March low numbers were caught in April to June (10, 11 and 9) before 20 in July with just seven in August and eight in September. The main autumn movement was in October, with 93 for the month, the highest day catch being

15 on the 26th. There were many birds on the island on the 3rd November; the last day ringing took place, with 16 caught.

*Björktrast Fieldfare (Turdus pilaris) 6(5.1)

Spring records were confined to just two birds; on 24th April and 12th June. 11th July produced a further bird with a long gap until two were caught on 15th October and the last bird of the year was trapped on the 30th of that month.

Taltrast Song Thrush (Turdus philomelos) 135(93.3)

The first bird was caught on the 5th April, with 41 for the month, 20 of which were caught on the 17th, the only day in the year to reach double figures and the highest spring day catch in the history of the Observatory. The majority of the 19 birds caught in May were in the first three weeks, numbers dropping to just two in June (28th and 29th), one in July (30th) and four in August before September produced 40 birds, mainly in the second half of the month. There were 28 birds in October, the last of the month (and year) being on the 26th.

Rödvingetrast Redwing (*Turdus iliacus*) 8(24.0)

Two birds in April (17th and 25th) were the only ones of the spring. No further birds were caught until 5th October, with six caught in the month, the last being on the 26th.

- *Gräshoppsångare Grasshopper Warbler (Locustella naevia) 2(1.4)
 Only two birds in the year, both in August; the 14th and 29th.
- *Sävsångare Sedge Warbler (Acrocephalus schoenobaenus) 6(12.9)
 Three birds on spring migration on 27th and 28th May and then 21st June were followed by three in autumn, all in August on: 12th, 19th and 20th.
- *Busksångare Blyth's Reed Warbler (Acrocephalus dumetorum) 2(0.4)
 A single on the 28th May was the second earliest record for the Observatory (21st May 2014 being the earliest). One on the 11th July was the only other record.

Kärrsångare Marsh Warbler (Acrocephalus palustris) 14(10.5) All birds were in the first half of the year, starting with a single on the 20th May, with four more birds that month. Of nine birds in June three were trapped on the 3rd, followed by singles on three more dates before the last three were trapped on the 20th.

RörsångareReed Warbler
(Acrocephalus scirpaceus) 39(35.9)
The first two birds were on the relatively late date of 21st May, with 12 in the month overall. Thirteen birds on ten dates in June finished with the last spring bird on the 20th. In July, three birds were trapped, one on the 23rd and two on the last day of the month. Six on five days in August were followed by five in September, the last being on the 12th.

Härmsångare Icterine Warbler (*Hippolais icterina*) 63(15.2) A record year for the species, (61 in 2014): records highlighting the early start to return migration for the species. After one on 17th May there was a further nine birds on five dates in the month, including three on the 28th. After seven in June there were 37 birds in July, starting with one on the 6th. From mid-month until the months end they were almost daily with a high of six on the 16th. Numbers

declined rapidly thereafter with nine in August, the last of which was on the 23rd.

*Höksångare Barred Warbler (Sylvia nisoria) I (4.1)

The only record of the year was of a single on 6th June.

Ärtsånare Lesser Whitethroat (Sylvia curruca) 454(222.9)

A record year for the species: the previous highest being 408 in 20014. The first of three April records was on the 26th with birds trapped almost daily in May, with 103 for the month and a high count of nine on the 14th. There were fewer birds in June with 36 on eighteen days before becoming almost daily again in July with 88 on twenty-seven days. August produced 158 birds with a high count of 23 on the 17th, with the first half of September producing 55 of the total of 62 for the month, the last being on the 30th. There was just one more record for the year, a very late bird on the 31st October.

Törnsångare Common Whitethroat (*Sylvia communis*) I 15(84.3) After one on the 8th May there were a total of 32 for the month, with four on the 24th. June produced 20 birds on just ten dates with 21 in July before return migration peaked during August with 41 on 21 dates including five on the last day of the month. The only bird in September, on the 13th, was the last for the year.

Trädgårdssångare Garden Warbler (*Sylvia borin*) 95(71.4)

The first of the year was on 15th May, followed by a further 16 birds for the month with just four in June, the last being on the 12th. Only six birds in July, all but one being in the second half of the month; marking the start of return migration, which peaked in August with 60 birds on 19 dates, including 16 on the 19th. There were seven birds in September before the last of the year on 2nd

Svarthätta Blackcap (Sylvia atricapilla) 331(146.1)

October.

A single on the 28th March was the earliest date ever for the species, with eight in April, all in the second half of the month. Spring passage was light with just 17 birds in May and seven in June. After one bird on 9th July return passage was noted from the middle of the month, numbers reaching 95 in August with the majority (89) in the last two weeks, rising to 156 in September before declining in early October with 23 of the months birds caught in the first seven days. The last bird of the year was on the 3rd November; the final day that ringing took place.

*Lundsångare Greenish Warbler (Phylloscopus trochiloides) I (0.9)
A single on 8th June was the only bird of the year.

*Taigasångare Yellow-browed Warbler (*Phylloscopus inornatus*) 9(1.1)
A record year for the species: beating the 2014 total of six and reflecting a remarkable influx of the species into Western Europe. After the first on the 15th September and a second on the 19th, the five day period 21st to 25th produced a bird a day, with one more on 29th before the final bird of the year on the 4th October.

Grönsångare Wood Warbler (*Phylloscopus sibilatrix*) 21(10.1) There were no spring records with the first for the year being on 29th July, the only record for that month. August produced the bulk of records with 14, four of which were on the 15th. All of the six September records were in the first half, finishing with four on the 15th; the last of the year.

Gransångare Chiffchaff (Phylloscopus collybita) 242(46.6)

A record year for the species starting with one on 5th April and caught almost daily from mid-month to give an April total of 77, followed by 55 in May with ten on the 1st but caught less frequently as the month progressed. After just eight in June there were no birds in July and only one in August (6th) before 50 in September, increasing in numbers from mid-month. The first three weeks of October accounted for all birds that month, 52 in total with 18 on the 2nd and the final three birds on the 20th.

*Östlig gransångare Chiffchaff (*Phylloscopus c. abietinus*) I(28.1)
An individual of the race was trapped on 10th October.

Lövsångare Willow Warbler (*Phylloscopus trochilus*) 867(727.1)

After one on the 18th April (2nd earliest date for the species) a further 33 birds were caught in the month, with 17 on the 29th. May produced 243 birds with high counts of 20 on the 14th and 17th before numbers declined towards the month end. There just 13 birds on eleven dates in June before captures almost daily after the first week of July, with 85 for the month. August was the busiest month with 317 birds including 72 on the 17th. The 5th September produced 33 of the month's total of 173 birds, numbers declining towards the end of the month with two on the 2nd October being the last of the year.

Kungsfågel Goldcrest (Regulus regulus) 1594(1817.1) A below average year starting with 34 on the 5th April, suggesting the first few days of spring passage were missed. Most of the 195 birds for that month were caught in the first three weeks, with just ten birds in May, the last being on the 13th. There were no further birds until the first of seven for August on the 17th. Captures were daily in September from the 3rd onwards with a total of 619 and a high count of 70 on the 24th. Within the 763 for October there were counts exceeding 100 on just two dates (2nd and 3rd) with 133 and 103 respectively. The final two birds of the year were on 31st October.

Grå flugsnappare Spotted Flycatcher (*Muscicapa striata*) 58(51.4) The first two of ten birds in May were trapped on the 22nd, a relatively late date for first capture, with just three birds in June and two in July before return passage became more evident in August with 27, mostly from the last two weeks, with the last of 16 birds for September on the 22nd.

Mindre flugsnappare Red-breasted Flycatcher (*Ficedula parva*) 10(5.9) After two spring birds on 20th May and 2nd June there were no further birds until two on the 9th September, the first of seven for the month. The last bird of the year was on 19th October, the latest date recorded at the Observatory.

*Halsbandsflugsnappare Collared Flycatcher (*Ficedula albicollis*) 2(1.1)
An adult male on 29th April was the first of the year and second earliest for the Observatory, after one on the 24th April in 1993. The only other record was of a female on the 22nd May.

Svartvit flugsnappare Pied Flycatcher (*Ficedula hypoleuca*) 74(50.8) One on 12th May was the first of the year and first of twelve for the month. In June a female ringed on the nest on the 3rd and seven young at the same nest on the 21st were the only birds of the month. August accounted for the majority of birds with 52 on fourteen dates starting with one on the 5th and a high count of

26 on the 21st. Singles on the 3rd and 5th September were the last birds of the year.

*Skägmmes Bearded Tit (Panurus biarmicus) 3(3.6)

Three birds on the 31st October were the only birds of the year.

Stjärtmes Long-tailed Tit (Aegothalos caudatus) 287(56.7)

A record year for the species, with all birds caught on twenty one dates in October, starting with five on the 2nd, a high count of 33 on the 11th and the final, 25, birds on the 31st. Two birds of the race europaeus were trapped on the 13th.

Entita Marsh Tit (Poecile palustris) 12(7.6)

A single on the 9th April preceded four young ringed in the nest on 3rd June, all four subsequently re-trapped in nets as the season progressed. Six more birds between 20th and 25th June were the only birds other than the last of the year on the 22nd August.

*Svartmes Coal Tit (Periparus ater) 6(37.6)

Just six birds for the year, starting with one at SUDD on 25th September, with three on the 3rd October and two on 14th October, one of which was from SUDD.

Blames Blue Tit (Cyanistes caeruleus) 423(242.6)

After three in March and a further three in April there were no further birds until nine and eight young were ringed in nest boxes on 2nd and 10th June respectively, part of a total of 29 for the month, with 20 in July and just six in August. September produced 169 birds, numbers increasing from the middle of the month with a high of 38 on the 22nd. October produced birds almost daily with a high of 28 on the 26th and 191 for the month. The last of the year were on 3rd November.

Talgoxe Great Tit (Parus major) 549(188.3)

A record year for the species, passing the 2006 figure of 380 by 169, assisted no doubt by ringing 156 young in nest boxes. After ten in March and a further 14 in April the total of 43 in May included 41 young in nests. The June total of 166 likewise included 115 young in nest. Numbers in July and August were 24 and 15 respectively before increasing through September to give 57 for the month, with 215 in October and a high count of 21 on the 10th. The final five birds were on the 3rd November.

Nötväcka Nuthatch (Sitta europaea) 10(4.4)

Just ten birds for the year, nine of which were on seven dates between 7^{th} and 22^{nd} June with the final bird of the year on the 1^{st} July.

Trädkrypare Treecreeper (*Certhia familiaris*) 172(77.5)

After one on 6th April there were just five in June, two in July and one on 23rd August. September marked the start of autumn migration with 18 birds, all but one in the second half of the month; with seven on the 23rd. Birds were trapped on most days in October to give 144 for the month, with 18 on each of the days: 13th, 14th and 17th. The final bird of the year was on the 3rd November.

Törnskata Red-backed Shrike (Lanius collurio) 78(45.1)

After one on 12th May there were 17 for the month, including six on the 27th, with just one bird in June (3rd). Of seven in July, individuals were caught on each of the last five days of the month. August produced 52 birds, concentrated round the middle of the month with nine on the 12th. The last bird of the year was the only bird for September (5th).

*Varfågel Great Grey Shrike (Lanius excubitor) 2(1.5)

Only two birds for the year, one on 21st and one on 26th October.

*Skata Magpie (Pica pica) 4(0.7)

A record year: with individuals on 15th April, 29th June, 3rd and 28th July.

*Kaja Jackdaw (Corvus monedula) 6(0.1)

With only two birds previously caught (2012 and 2015) six birds represented a significant increase. Three were caught in the first half of the year: 15th April, 9th May and 24th June. There were captures on two further dates with two on 6th July and one on 25th July.

Stare Starling (Sturnus vulgaris) 68(18.3)

Two in April on 12th and 21st were followed by a total of 56 in May, 48 of which were young in nest boxes, four of which were subsequently re-trapped in nets. After seven birds in June, there were two on the 2nd July, with the next bird and last for the year on the final day of ringing on 3rd November.

Pilfink Tree Sparrow (Passer montanus) 122(20.3)

A record year for the species: the previous best being in 2014 with 117. Singles on 31st March and 23rd April were the only birds until two young were ringed in a nest box on 31st May, both of which were later re-trapped in nets. Following four in June numbers increased in July to give 42 for the month with 66 in August, including twelve on the 20th. Three were caught in each of the months September and October, the last of the year being on the 24th.

Bofink Chaffinch (*Fringilla coelebs*) 235(147.6)

After eleven in March birds were caught regularly in low numbers to give 51 for April, decreasing to 23 in May as spring migration finished. Numbers remained low from June to August with: 17, 12 and 10 respectively before becoming more regular through September (49), with 13 on the 10th being the highest count. October produced 62 birds, with a high count of 15 on the 24th, only the second day on which double figures were achieved, with the last birds of the year being two on 31st October.

Bergfink Brambling (Fringilla montifringilla) 40(43.6)

One bird on 28th March was the earliest date for the species since records began. Seven birds on four dates in April preceded a long gap in records before the first returning bird was caught on 22nd September, the only bird for the month. The majority of records came in October, with 29 birds before the last two were trapped on 3rd November.

*Gulhämpling Serin (Serinus serinus) 2(0.04)

The only prior record was of one on 29th April 2002, so birds on consecutive dates in June were notable, with a male trapped on 4th and female the following day. These two birds remained on the island for some time, and a well-

developed brood patch was present on the female suggesting a probable breeding attempt.

Grönfink Greenfinch (*Carduelis chloris*) 325(234.9)

After four in March numbers remained low, with just eight in April and 16 in May, with the first young of the year trapped on the 10^{th} . Forty in June preceded a busier July, with 97 birds caught on 26 days, reducing to 52 in August with a high count of 18 on the 5^{th} . Unusually, no birds were caught in September with the October total of 105 peaking around mid-month with 14 on the 15^{th} . The final three birds were on 3^{rd} November.

Steglits Goldfinch (*Carduelis carduelis*) 17(3.0)

Four in April were followed by just two in May; the only spring birds. Numbers peaked in July, with eight caught, mainly young, with just two birds in August (Ist) and the final bird of the year was on 21st October.

Grönsiska Siskin (Carduelis spinus) 1208(120.1)

A record year, easily passing the previous highest total of 717 achieved in 1994. After the first bird on 28th March there were 27 in April including ten on the 29th with two on the 1st May being the last birds of spring. No further birds were caught until two on 31st August, with numbers caught more regularly after the middle of September, with 349 for the month including 82 on the 26th. Three 100+ days in October, the highest being 204 on the 13th contributed to a total of 823 for the month with the final four birds on the 3rd November.

Hämpling Linnet (*Carduelis cannabina*) 90(12.4)

A record year, passing 33 achieved in 2008 and 2015. The first of the year was on 18th April, one of seven for the month, with 16 in May before the first young of the year was caught on 8th June, records becoming more regular from midmonth with a June total of 24. The 39 birds in August were spread through the month but declined sharply with just four in August with the last of year trapped on the 5th.

*Vinterhämpling Twite (Carduelis flavirostris) 3(1.5)
Only three birds for the year; all caught on the 31st October.

Gråsiska Redpoll (Carduelis flammea) 280(169.7)

The only record in the first half of the year was of a single on 9th June, the next being a single on 25th July, with none until two in the second half of September. October accounted for 260 birds, peaking in mid-month with 85 on the 14th. The last of the year were 16 on the 3rd November.

Nordlig gråsiska Mealy Redpoll (Carduelis f. flammea) 42(124.4)

After just one spring bird on 8^{th} June there were no further records until a single in September (20^{th}). October accounted for 39 birds, mainly around the middle of the month with seven on the 17^{th} being the highest day count. The final bird of the year was on 3^{rd} November.

Brunsiska Lesser Redpoll (Carduelis f. cabaret) 65(122.6)

Singles on 10th April and 11th June were the only spring records, followed by a further single on the 26th July with a gap until the first two birds of six in September were trapped on the 14th. October produced 54 birds from thirteen dates but double figures on only two dates: eleven on the 14th and ten on the 15th. The final two birds of the year were on the 3rd November.

*Större korsnäbb Parrot Crossbill (Loxia pytyopsittacus) I (0.04)
A single on the 13th June was only the second for the Observatory, the first being on 14th October 1990.

Rosenfink Scarlett Rosefinch (*Carpodacus eryhrinus*) 20(16.3) There were two in May the first being on 20th, with eight in June and four in July including the season's first recently fledged bird on the 22nd. After four in August there was only one more record: a single on 4th September.

Domherre

Bullfinch

(Pyrrhula pyrrhula)

239(49.1)

An excellent year for the species, second only behind 1994 when 249 were caught. There were just two spring records, with singles on 5th and 10th April. All other records came in October, with 237 birds, peaking around mid-month with 40 on the 16th and 39 the next day. The last birds of the year were seven on the 31st.

*Stenknäck Hawfinch (Coccothraustes coccothraustes) I (0.5)
A single on 23rd September was the only bird of the year.

Gulsparv Yellowhammer (*Emberiza citrinella*) 59(59.9) Spring numbers were low with just three in March, again in April and only two in May. After the first recently fledged bird on the 10th, June numbers totalled six, increasing to 19 in July, mainly young. After nine in August there were none in September but 17 in October including a high count of six on the 13th and the final three of the year on the 26th.

*Dvärgsparv Little Bunting (Emberiza pusilla) I (0.1)
A single on 2nd October was only the third record, the most recent being on 11th
May 2013.

Sävsparv

Reed Bunting

(Emberiza schoeniclus)

After one on the 28th, there was one further March record before 15 in April and nine in May, the last of the spring being caught on the 20th. There were no further records until a single on the 2nd July; the only record for the month with a further gap until the only September record of one on the 18th. Strong October winds prevented the reed nets being fully opened on all but two dates, the 2nd and 31st, the earlier date accounting for six of the months eleven birds, with the last bird of the year on the 17th. No doubt the inability to open the reed nets made a significant impact on the numbers caught in October.

Appendix B

Schedule of birds caught on Landsort in 2016, shown by descending numbers per species.

Goldcrest Siskin Willow Warbler Great Tit Lesser Whitethroat Blue Tit Blackcap Greenfinch Wren Long-tailed Tit Common Redpoll Chiffchaff	1594 1208 867 549 454 423 331 325 300 285
Willow Warbler Great Tit Lesser Whitethroat Blue Tit Blackcap Greenfinch Wren Long-tailed Tit Common Redpoll	867 549 454 423 331 325 300
Great Tit Lesser Whitethroat Blue Tit Blackcap Greenfinch Wren Long-tailed Tit Common Redpoll	549 454 423 331 325 300
Lesser Whitethroat Blue Tit Blackcap Greenfinch Wren Long-tailed Tit Common Redpoll	454 423 331 325 300
Blue Tit Blackcap Greenfinch Wren Long-tailed Tit Common Redpoll	423 331 325 300
Blackcap Greenfinch Wren Long-tailed Tit Common Redpoll	331 325 300
Greenfinch Wren Long-tailed Tit Common Redpoll	325 300
Wren Long-tailed Tit Common Redpoll	300
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Common Redpoll	285
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	Bullfinch Chaffinch Blackbird Treecreeper Song Thrush Tree Sparrow Whitethroat Garden Warbler Redstart Linnet Red-backed Shrike Pied Flycatcher Dunnock Starling Common Redpoll cabaret Icterine Warbler White Wagtail Yellowhammer Spotted Flycatcher Common Redpoll flammea Brambling Reed Bunting Reed Warbler Waxwing Wheatear Thrush Nightingale Wryneck Wood Warbler Common Rosefinch Great Spotted Woodpecker Goldfinch Marsh Warbler Swallow Bluethroat Marsh Tit Tree Pipit Nuthatch Red-breasted Flycatcher Sparrowhawk Yellow-browed Warbler Redwing Whinchat

Svartmes	Coal Tit	6
Björktrast	Fieldfare	6
Kaja	Jackdaw	6
Sävsångare	Sedge Warbler	6
Ängspiplärka	Meadow Pipit	5
GÖK	Cuckoo	4
Skata	Magpie	4
Skäggmes	Bearded Tit	3
Gröngöling	Green Woodpecker	3
Vinter Hämpling	Twite	3
Busksångare	Blyth's Reed Warbler	2
Halsbandsflugsnappare	Collared Flycatcher	2
Grässhoppsångare	Grasshopper Warbler	2
Varfågel	Great Grey Shrike	2
Mindre Hackspett	Lesser Spotted Woodpecker	2
Stjärtmes europaeus	Long-tailed Tit europaeus	2
Sydnäktergal	Nightingale	2
Gulhämpling	Serin	2
Ringduva	Woodpigeon	2
Höksångare	Barred Warbler	_
Svart rödstjärt	Black Redstart	_
Blåhake cyanecula	Bluethroat cyanecula	I
Gransångare abietinus	Chiffchaff abietinus	I
Lundsångare	Greenish Warbler	_
Stenknäck	Hawfinch	ı
Husvala	House Martin	I
Tornfalk	Kestrel	ı
Dvärgsparv	Little Bunting	I
Hornuggla	Long-eared Owl	I
Större Korsnäbb	Parrot Crossbill	ı
Gulärla	Yellow Wagtail	I

Appendix C

Schedule of species for which 2016 was a record year

Species	English	Previous best year	Previous highest	2016	Amount 2016 exceeds previous best year
Gök	Cuckoo	2013	3	4	I
Göktyta	Wryneck	2005	16	23	7
Gröngöling	Green Woodpecker	I in 8 years	I	3	2
Sädesärla	White Wagtail	2014	58	60	2
Gärdsmyg	Wren	2000	243	300	57
Rödhake	Robin	2014	1837	2142	305
Blåhake cyanecula	Bluethroat	First in 2016	0	1	1
Koltrast	Blackbird	2009	165	184	19
Härmsångare	Icterine Warbler	2014	61	63	2
Ärtsångare	Lesser Whitethroat	2014	408	454	46
Taigasångare	Yellow-browed Warbler	2014	6	9	3
Gransångare	Chiffchaff	2010	151	242	91
Stjärtmes	Long-tailed Tit	2010 & 2014	234	285	51
Stjärtmes europeaus	Long-tailed Tit	First in 2016	0	2	2
Talgoxe	Great Tit	2006	380	549	169
Skata	Magpie	2012	3	4	1
Kaja	Jackdaw	2012 & 2015	1	6	5
Pilfink	Tree Sparrow	2014	117	122	5
Gulhämpling	Serin	2002	ı	2	1
Grönsiska	Siskin	1994	717	1208	491
Hämpling	Linnet	2008	33	90	57