

Landsort Bird Observatory 2020 report



Prepared by Espen Quinto-Ashman and Matt Scragg
on behalf of Landsort Bird Observatory

Contents

| | |
|-------------------------|---|
| Cover photograph | - Red-breasted Flycatcher (Mindre flugsnappare) ©Espen Quinto-Ashman |
| 3 | - Introduction |
| 5 | - Summary |
| 6 | - Ringing summary per month |
| 11 | - Systematic summary of birds ringed during 2020 |
| 20 | - Table of birds ringed during 2020 |
| 22 | - Table of species with annual ringing total higher than in previous years - Table of species species with ringing day total higher than in previous years - Table of species with species with 10 or less individuals ringed on Landsort |
| 23 | - Graph showing daily ringing averages comparing half-month totals - Graph showing number of species and subspecies ringed on Landsort from 1988-2020 |
| 24 | - Graph showing comparison of annual totals from 1988-2020 - Graph showing ringing days per year from 1988-2020 |
| 25 | - Nest box summary - Table of box occupancy in spring 2020 |
| 26 | - Swift nest boxes on the Fågelstation building |
| 27 | - Monthly summary of bird sightings on Landsort in 2020 |
| 36 | - Yellow-browed warbler project |
| 36 | - Bed nights, membership fees and other income |
| 37 | - Guided talks |
| 38 | - Systematic list of butterflies recorded on Landsort during 2020 |
| 41 | - Systematic list of odonata recorded on Landsort during 2020 |
| 43 | - Systematic list of moths recorded on Landsort during 2020 |

Introduction

This document contains the 2020 report of ringing activities, sightings, guided talks and current projects taking place at the station and is a part of the annual reporting of Föreningen för Landsorts Fågelstation. It is prepared by the wardens Matt Scragg and Espen Quinto-Ashman at Landsort Bird Observatory.

This season has been the second year on Landsort for wardens Matt and Espen and the 31st year of ringing on the island.

Matt has been ringing birds for seven years and this is his fourth year as a licensed ringer. He spent many years working as a zoo keeper and in conservation before he became involved with bird ringing. He was a warden at Landguard Bird Observatory in Suffolk, England during the seasons of 2017 and 2018 and was also involved with a seabird ringing project on a remote Scottish island, Sule Skerry, in July 2018.

Espen has been interested in both birds and environmental conservation since childhood. He recently spent two years working in Vardø in Norway, primarily with bird ringing projects but also with a local marine cleanup initiative. Espen has worked voluntarily in a number of bird observatories in his home country of the UK, including North Ronaldsay, Spurn, Portland and Bardsey. He has also worked on ringing projects in a number of other countries including Spain, Romania, Azerbaijan and Mongolia.



2020 wardens Espen Quinto-Ashman (left) and Matt Scragg (right) ©Emma Karlsson

Many thanks are due to those who have made 2020 possible during a difficult period for all sectors, there have been many challenges to address throughout the season. We would like to thank the management board, in particular Emma Karlsson, for continued support and guidance during this time. Thank you to Caroline Sjöström, appointed ringer in charge at the start of this season, we hope to continue working with you in the future.

Appreciation to all the members who have visited during the year, thank you for your cooperation and enabling social distancing measures to keep the overnight facility functioning. Additional thanks to the everyone who submitted sightings and contributed documentation to verify unusual records in Artportalen.

We would like to thank the island community for their ongoing support, and providing assistance for us when needed, in particular Tore Jacobsson for providing technical support, giving lifts into Nynäshamn for shopping and taking recycling.

Throughout our time at Landsort Pelle Johansson has provided support and advice, we have greatly appreciated his knowledge, friendship and company when he has been at the station. Thanks to Chris Sharpe and Kay Collister for continuing to provide support and guidance with the data recording in excel and quick responses to our requests for help.

Thanks to Thomas Wenninger and the staff at Ringing Central for their hard work maintaining the databases, providing support with Fågel 3 and for promptly fulfilling ring replacement orders during exceptional demand this autumn migration!

The 'Leader Project' has again provided funds for our work this year. This financial support has been vital for the continued and consistent running of the observatory and has allowed for its development. Through the guided talks, we have spread awareness of our research and the importance of conservation work in this region to a wider audience.

Broadly, the aims of the Leader Project are:

“To work with the staff at Landsort Bird Observatory who are responsible for guiding, environmental monitoring and the scientific projects placed at the station as well as for close cooperation with local visitors, schools and other relevant bodies. The project consists of bird ringing, guided tours, lectures, marketing and to develop procedures for collecting biological material as well as manning and care of the bird station.”

We believe that the staff, board, members and the island community have worked together to achieve these goals.



Landsbygd och skärgård där lokala initiativ i samspel med omvärlden utvecklar hållbara attraktiva samhällen som sprider framtidstro



Europeiska jordbruksfonden för landsbygdsutveckling: Europa investerar i landsbygdsområden

Summary

2020 has been an exceptional season for ringing on Landsort, the previous highest annual total has been blown out of the water! This has been reflected with an increase on year records for some of our most regular passage migrants. The spring migration period was above average, compared to the standardised period (starting 2016) and it was a good breeding season for many of the island's breeding passerines. A truly exceptional autumn migration season followed, significant numbers of Willow Warblers (Lövsångare) began to pass through from the end of August until mid-september. Later migrants like Goldcrests (Kungsfågel) and Robins (Rödhake) started to move from mid-september. Late in the month (from 26th), with a change in wind direction to south-easterly, migration of these species went through the roof. An influx of Redpolls meant daily catch rates remained well above average until late October, when numbers of these then began to decline.

During 2020 two new bird species for the island were recorded. The first was a Stejneger's Scoter (Sibirisk knölsvärta) seen on migration from Södra Udden in April, with a second record in May. Then in October two Pallid Swift (Blek tornseglare) were present over the south of the island.

Throughout the spring period daily migration counts were conducted from Södra Udden and this data was submitted to Artportalen.

From mid-March until early November the moth trap acquired last autumn was in operation every night. The moths caught were then identified and counted the following day before being released. Through this we have collected valuable data on the moth species present on the island, data for abundance and flight seasons of these species during this year.

Work at the observatory this year was structured on the continuation of the standardised protocol for monitoring and ringing at Bredmar, submission of ringing data to Ringing Central, holding guided talks for guests and visitors, monitoring breeding birds in the 260 nest boxes located throughout the island, keeping the observatory building clean and tidy and the compilation of monthly and annual reports on this work. Other maintenance and organisational tasks have completed in addition to these as part of the day to day running of the observatory.

Ringling Summary by Month

April

Weather summary

On 2nd there was a wind storm with maximum gusts over 33m/s, this carried on into 3rd after which calmer weather resumed. Predominantly Southerly winds for the first 12 days of the month became Northwesterly for the next six. Following this the wind subdued and became more variable in direction, but generally more favourable for northbound migrants. The 28th was the only day with significant precipitation.

Ringling

There were a total of 1429 birds of 33 species ringed and 180 subsequent encounters of 15 species. This total is slightly higher than the average of 2016-2019 (the duration in which standardised ringling has taken place). The most numerously ringed species were Robin (Rödhake) with 875 and Chiffchaff (Gransångare) with 120. The highest day capture was on 29th when 277 birds were ringed and the lowest was on 1st when seven birds were ringed.

There were three controls:

- 13th: Robin (Rödhake), Russia
- 27th: Goldcrest (Kungsfågel), Sweden
- 29th: Robin (Rödhake), Finland

Infrequently ringed species:

- 1 Ring Ouzel (Ringtrast) on 15th, the first caught since May 1999 and fifth ringed on Landsort
- 1 Firecrest (Brandkronad kungsfågel) on 21st, the 10th ringed on Landsort
- 1 Great Grey Shrike (Varfågel) on 25th, the fourth ringed in spring
- 1 Magpie (Skata) on 26th

May

Weather summary

There were several days with precipitation at the beginning of the month, mostly in the form of light showers and drizzle. There was a cold and squally day on 13th with sleet showers and strong wind. Conditions settled with temperatures increasing during the last week of the month.

Ringling

There were a total of 1356 birds of 45 species ringed and 143 subsequent encounters of 21 species. This total is higher than the average of 2016-2019 (the duration in which standardised ringling has taken place). The most numerously ringed species was Willow Warbler (Lövsångare) with 438 and Lesser Whitethroat (Ärtsångare) with 260. The highest day capture was on 2nd when 115 birds were ringed and the lowest was on 7th when nine birds were ringed.

There were six controls:

- 5th: Chiffchaff (Gransångare), Sweden
- 6th: Pied Flycatcher (Svartvit flugsnappare), Norway
- 8th: Willow Warbler (Lövsångare), Poland
- 9th: Redstart (Rödstjärt), Sweden
- 21st: Garden Warbler (Trädgårdssångare), Spain
- 22nd: Chiffchaff (Gransångare), Sweden

Infrequently ringed species:

Less frequently caught species included:

- 2 Hobby (Lärkfalk), one on 14th and one on 15th, the third and fourth ringed on Landsort
- 2 Blyth's Reed Warbler (Busksångare), one on 26th and one on 30th, the 17th and 18th ringed on Landsort

June

Weather summary

Temperatures increased slowly throughout the month, with several days topping 20°C during the last week, ending cooler and unsettled with strong south-westerlies during the final two days. Unsuitable weather prevented ringing on 7th and 29th.

Ringing

There were a total of 638 birds of 45 species ringed and 206 subsequent encounters of 22 species. This total is the second highest compared with the average of 2016-2019 (the duration in which standardised ringing has taken place). The most numerous species ringed was Great Tit (Talgöxe) with 231 and Lesser Whitethroat (Ärtsångare) with 50. The highest day capture was on 4th when 56 birds were ringed (42 of these were Great Tits from nest-boxes) and the lowest was on 21st when two birds were ringed.

There was one control:

- 28th: Swallow (Ladusvala), Finland

Infrequently ringed species:

- 1 Nightjar (Nattskärja) on 6th, the fourth ringed on Landsort
- 1 Swift (Tornseglare) on 24th, the fifth ringed on Landsort
- 1 Blyth's Reed Warbler (Busksångare) on 9th, the 18th ringed on Landsort
- 1 Crested Tit (Tofsmes) on 15th, the sixth ringed on Landsort
- 2 Jackdaw (Kaja) on 8th, the 13th and 14th ringed on Landsort
- 1 Common Crossbill (Mindre korsnäbb) on 25th, the 13th ringed on Landsort

July

Weather summary

Strong south-westerlies, which set in during the last days of June continued into the first week of the month, after which conditions settled somewhat. Temperatures were mild, only topping 20°C on a handful of dates, mostly in the latter half of the month. Unsuitable weather prevented ringing on 1st, 3rd, 4th, 6th, 7th, 11th and 30th.

Ringing

There were a total of 462 birds of 40 species ringed and 254 subsequent encounters of 24 species. This total is the lowest since standardised monitoring began (in 2016), in contrast to previous months which have all been higher than average. The most numerous species ringed was Lesser Whitethroat (Ärtsångare) with 80 followed by Greenfinch (Grönfink) and White Wagtail (Sädesärsla) with 33 of each. The highest day capture was on 28th when 53 birds were ringed and the lowest was six on three different dates. Additionally we made a trip to Lilla Kärringholmen in Norrhamn on 2nd to ring gull and tern chicks. When we arrived there were fewer chicks than were present a week earlier, we ringed two Black-headed Gull (Skrattmåsar) and one Arctic Tern (Silvertärna).

August

Weather summary

A very dry month with mild to warm temperatures (several nights the temperature didn't drop below 20°C mid-month). There was no precipitation until 22nd when it rained a little during the morning, followed by three other days with limited rainfall towards the end of the month. Unsuitable weather prevented ringing on 23rd, 24th and 25th.

Ringing

There were a total of 965 birds of 48 species ringed and 233 subsequent encounters of 21 species. This total is the third highest since standardised monitoring began (in 2016). The most numerous species were Willow Warbler (Lövsångare) with 329 ringed and Lesser Whitethroat (Ärtsångare) with 235 ringed. The highest day total was on 28th when 174 birds were ringed and the lowest was on 6th when seven birds were ringed.

Infrequently ringed species:

- 1 Cuckoo (Gök) juvenile on 1st, the 25th ringed on Landsort
- 1 Nightjar (Nattskärna) juvenile on 7th, the 5th ringed on Landsort
- 1 Lesser Spotted Woodpecker (Mindre hackspett) juvenile on 30th, the 51st ringed on Landsort
- 1 Yellow Wagtail (Gulärsla) juvenile on 31st, the 25th ringed on Landsort
- 1 Grasshopper Warbler (Gräshoppsångare) juvenile on 18th, the 50th ringed on Landsort
- 1 Blyth's Reed Warbler (Busksångare) adult on 1st, the 19th ringed on Landsort
- 1 Greenish Warbler (Lundsångare) juvenile on 12th, the 47th ringed on Landsort

September

Weather summary

An unsettled first half of the month, with prevailing westerlies, became more settled later in the month, with prevailing easterly winds. Precipitation was recorded on several dates, mostly during the first half of the month. Unsuitable weather prevented ringing on 5th, 6th, 8th, 9th, 10th, 12th and 17th.

Ringing

There were a total of 3854 birds of 43 species ringed and 290 subsequent encounters of 25 species. This total is the highest since standardised monitoring began (in 2016), the average being 2228. The most numerous species were Goldcrest (Kungsfågel) with 1577 ringed and Robin (Rödhake) with 460 ringed. The highest day total was on 26th when 641 birds were ringed and the lowest was on 16th when 21 birds were ringed.

There were two controls:

- 23rd: Redpoll (Gråsiska), Sweden
- 26th: Goldcrest (Kungsfågel), Estonia

Infrequently ringed species:

- 13 Yellow-browed Warbler (Tajgasångare): the first on 2nd, the highest day total was seven on 26th

October

Weather summary

Easterly winds continued to prevail during the first week of October, then westerly winds dominated until the end of the month. A fairly wet month with precipitation recorded on 12 dates which refilled dried out wetland areas. Unsuitable weather prevented ringing on 9th, 14th, 18th, 19th, 22nd and 28th.

Ringing

There were a total of 5481 birds of 38 species ringed and 298 subsequent encounters of 20 species. This total is the highest since standardised monitoring began (in 2016), the average being 2885. The most numerous species were Goldcrest / Kungsfågel with 2203 ringed and Redpoll / Gråsiska with 1676 ringed. The highest day total was on 2nd when 624 birds were ringed and the lowest was on 25th when 37 birds were ringed.

There were 10 controls:

- 3rd: Goldcrest (Kungsfågel), Sweden
- 5th: Goldcrest (Kungsfågel), Finland
- 5th: Redpoll (Gråsiska), Sweden
- 7th: Siskin (Grönsiska), Norway
- 8th: Redpoll (Gråsiska), Norway
- 10th: Redpoll (Gråsiska), Sweden
- 12th: Blue Tit (Blåmes), Poland
- 12th: Redpoll (Gråsiska), Norway
- 15th: Blue Tit (Blåmes), Sweden
- 23rd: Chiffchaff (Gransångare), Norway

Infrequently ringed species:

- 1 Sedge Warbler (Sävsångare) on 5th was the second latest record for Landsort, the latest was ringed on 13th October 2000
- 2 Pallas's Warbler (Kungsfågelsångare), the first on 8th and the second on 31st, the 41st & 42nd ringed on Landsort
- 4 Yellow-browed Warbler (Tajgasångare), two on 1st, 1 on 4th and one on 8th
- 1 Radde's Warbler (Videsångare) on 7th, the third ringed on Landsort
- 1 Siberian Chiffchaff (Sibirisk gransångare) on 27th, first of the autumn
- 8 Bearded Tit (Skäggmes), five on 13th and three on 17th, first since 2018
- 22 Long-tailed Tit (Stjärtmes), four on 17th, eight on 20th and 10 on 23rd, first since 2018
- 3 Great Grey Shrike (Varfågel), one on 3rd and two on 12th

November

Weather summary

The month started with a strong southwest wind, becoming northwest from 5th onwards and reducing in strength. Light rainfall occurred on 1st and 2nd, after which it remained fairly dry. Unsuitable weather prevented ringing on 1st, 2nd and 5th.

Ringing

There were a total of 350 birds of 23 species ringed and 60 subsequent encounters of 10 species. The most numerous species were Redpoll (Gråsiska) with 203 ringed and Bullfinch (Domherre) with 24 ringed. The highest day total was on 4th when 101 birds were ringed and the lowest was on 12th when 3 birds were ringed. We began taking down nets on 10th and the last ones were removed on 12th.

There were three controls:

- 4th: Redpoll (Gråsiska), Norway
- 9th: Blue Tit (Blåmes), Sweden
- 9th: Waxwing (Sidensvans), Lithuania

Infrequently ringed species:

- 3 Bearded Tit (Skäggmes), two on 6th and one on 8th
- 1 Siberian Chiffchaff (Sibirisk gransångare) on 9th

Systematic summary of birds ringed on Landsort in 2020

For each species the Swedish, English and scientific names are given. For the purpose of this report 'spring' is the period 1st April to 30th June, while 'autumn' relates to the period 1st July to 10th November. Figures after the scientific name indicate the number ringed in 2020 with the average for the period 1988-2019 shown in brackets after.

Sparvhök Sparrowhawk (*Accipiter nisus*) 9(7.8)

The first of the year was ringed on 31st July, this was followed by one in August, five in September and two in October, the last on 30th.

Lärkfalk Hobby (*Falco subbuteo*) 2(0.1)

The third and fourth to be ringed on Landsort were caught on 14th and 15th May, the previous two were in May 1988 and May 2007.

Skrattmås Black-headed Gull (*Chroicocephalus ridibundus*) 2(5)

Two pulli were ringed on a trip out to Lilla Käringholmen on 2nd July, the first since 2009.

Silvertärna Arctic Tern (*Sterna paridisea*) 1(6.5)

One pullus was ringed on a trip out to Lilla Käringholmen on 2nd July, the first since 2012.

Gök Cuckoo (*Cuculus canorus*) 1(0.8)

A juvenile was ringed on 1st August. This is lowest overall year total since standardised ringing began, however 14 of the total 25 ringed on Landsort have been ringed since standardised ringing was introduced, probably as a result of continuous ringing throughout the summer when the species is most likely to be caught.

Nattskärra Nightjar (*Caprimulgus europaeus*) 2(0.1)

The fourth and fifth to be ringed on Landsort were caught on 6th June and 7th August, the previous were in May 1990, May 1995 and September 2013.

Tornseglare Swift (*Apus apus*) 1(0.1)

The fifth for Landsort was ringed on 24th June. Three of the previous four were ringed in 2018, with one in 2014.

Göktyta Wryneck (*Jynx torquilla*) 15(6.1)

The first of the year was ringed on 27th April, followed by one in May. In July there were ten juveniles and one adult female (with a brood patch), the last was on 17th August. Of the four years with 15 or more individuals ringed, three have been since standardised ringing was introduced.

Större Hackspett Great Spotted Woodpecker (*Dendrocopos major*) 11(7.8)

The first was ringed on 24th June, followed by six in July, two in August and the last two on 18th September. All birds ringed this year were juveniles.

Mindre hackspett Lesser Spotted Woodpecker (*Dryobates minor*) 1 (1.6)

One juvenile ringed on 30th August was the first since 2016.

Ladusvala Barn Swallow (*Hirundo rustica*) 17(8.3)

The first of eight in June was on 2nd. There were five in July, with the first juvenile on 16th, then four on 2nd August.

Hussvala House Martin (*Delichon urbicum*) 4(11.5)

The first of two in June was ringed on 23rd and two in July were both on 16th.

Trädpiplärka Tree Pipit (*Anthus trivialis*) 14(11.3)

The sole spring record was ringed on 14th May. The first two of five in August were ringed on 21st and the last of eight in September on 15th.

Ängspiplärka Meadow Pipit (*Anthus pratensis*) 18(8.7)

The first two of 17 in September were ringed on 25th, then one in October on 5th. This is the highest year total since standardised ringing began.

Gulärkla Yellow Wagtail (*Motacilla flava*) 1(0.8)

A juvenile ringed on 31st August was the 19th ringed on Landsort.

Sädersärkla White Wagtail (*Motacilla alba*) 71(29.7)

The first of two in April was ringed on 19th, followed by three in May, 24 in June (the first juvenile on 15th), 33 in July, seven in August and two in September, the last on 22nd. This is the highest annual total for this species.

Sidensvans Waxwing (*Bombycilla garrulus*) 23(15.9)

The first was on 28th March, followed by two in April, both on 4th. There were 11 ringed in October, all on 30th and there were nine in November on three dates, the last two on 9th. An irruptive species with very variable annual ringing totals.

Gärdsmyg Eurasian Wren (*Troglodytes troglodytes*) 309(116.6)

A relatively low spring total of 33, the first on 26th March and the last two on 19th May. 10 juveniles were ringed on 10 different dates in July. The first of an exceptional 254 in autumn was on 7th September and the last two on 9th November. This is the highest annual total for this species.

Järnsparv Dunnock (*Prunella modularis*) 103(61.4)

There were 49 ringed during the spring, the first on 26th March and the last on 29th April. The first of 54 in autumn was on 21st September and the last on 21st October.

Rödhake Robin (*Erithacus rubecula*) 1901(1068.6)

The first of 20 in March was on 26th. 875 were ringed in April with migration peaking on 29th with 227. There were 73 in May, two in June, 15 in July and 22 in August. There were 460 ringed in September, 413 in October and 21 in November with the last on 10th. The highest autumn day total was 101 on 26th September. An above average year, with the exact same year total as 2019.

Näktergal Thrush Nightingale (*Luscinia luscinia*) 27(20.3)

The first of 13 ringed in May was on 3rd. One ringed in June, three in July (the first juvenile on 13th), nine in August and the last on 3rd September.

Blåhake Bluethroat (*Luscinia svecica*) 26(28.8)

The first of 24 in May was ringed on 15th, and the last on 26th. Two were ringed during autumn, one on 28th August and the other on 3rd September.

Rödstjärt Common Redstart (*Phoenicurus phoenicurus*) 153(104.8)

The first of four in April was ringed on 25th, there were 97 in May, seven in June, nine in July (with the first juvenile on 13th), 15 in August, 20 in September and the last on 4th October. This is the highest annual total since the start of standardised ringing.

Buskskvätta Whinchat (*Saxicola rubetra*) 13(15.5)

The first was ringed on 25th April. There were six in May, one in June, one in July, three in August and the last on 3rd September.

Stenskvätta Northern Wheatear (*Oenanthe oenanthe*) 12(17.6)

The lowest annual total since the start of standardised ringing. The first of three in May was ringed on 15th, there were four in June, four in July and the last on 11th September.

Ringtrast Ring Ouzel (*Turdus torquatus*) 1(0.1)

One ringed on 15th April was the fifth ringed on Landsort and the first since 1999.

Koltrast Blackbird (*Turdus merula*) 198(110.5)

The first six of 11 in March were ringed on 26th. There were 20 in April, nine in May (the first juvenile on 30th), 15 in June, 17 in July, 19 in September, 69 in October and 23 in November, the last on 12th. A species that has seen an increase in numbers ringed since standardisation began, with 184 in 2016, 191 in 2018, 196 in 2019 and an increase to 198 this year.

Björktrast Fieldfare (*Turdus pilaris*) 13(5.2)

The first of nine in April was ringed on 13th. There were singles in May, August, October and November, the last on 9th.

Taltrast Song Thrush (*Turdus philomelos*) 215(104.5)

The first of 73 in April was on 5th, followed by 17 in May, one in June, one in July and three in August. 69 were ringed in during September, and 48 in October. The last of three in November was on 6th. This species has seen an increase in numbers ringed since standardisation began and this is the second highest annual total.

Rödvingetrast Redwing (*Turdus iliacus*) 64(25.5)

The first three of 49 in April were on 7th, there was one in May. Two on 18th September were the first of four that month, there were eight in October and two in November, the last on 7th. The second highest annual total since standardised ringing began.

Gräshoppsångare Grasshopper Warbler (*Locustella naevia*) 1(1.5)

A juvenile was ringed on 18th August, the only individual this year.

Sävsångare Sedge Warbler (*Acrocephalus schoenobaenus*) 15 (12.6)

The first of five in May was ringed on 2nd. There were four in June, four in August, one in September and finally one on 5th October – the second latest ringed on Landsort.

Busksångare Blyth's Reed Warbler (*Acrocephalus dumetorum*) 4(0.5)

There were two ringed in May, on 26th and 31st, one on 9th June and one on 1st August. This is the highest annual total for Landsort, reflecting an influx of the species across Northern and Western Europe.

Kärrensångare Marsh Warbler (*Acrocephalus palustris*) 16(11.3)

The first of three was ringed on 28th May, followed by 10 in June, two in July and the only juvenile of the year on 30th August.

Rörsångare Reed Warbler (*Acrocephalus scirpaceus*) 32(35.2)

The first of eight in May was on 19th. There were 17 in June, one in July, four in August and two in September, both on 7th.

Härmsångare Icterine Warbler (*Hippolais icterina*) 61(22.4)

The first of thirteen in May was on 15th, followed by 10 in June, 21 in July (the first juvenile on 25th) and 17 in August, the last on 28th. This is the lowest annual total since standardised ringing began.

Ärtsångare Lesser Whitethroat (*Sylvia curruca*) 701(262.8)

The first of two in April was on 29th. There were 260 in May, 50 in June (the first juvenile on 26th), 80 in July, 235 in August and 74 in September, the last on 29th. This is the highest annual total for the species.

Törnsångare Whitethroat (*Sylvia communis*) 131(87.3)

The first of 59 in May was on 2nd. There were 24 in June, 19 in July, 25 in August and four in September, the last on 7th. This is the highest annual total since standardised ringing began.

Trädgårdssångare Garden Warbler (*Sylvia borin*) 74(73.4)

The first of 15 in May was on 15th. There were eight in June, seven in July, 25 in August, 17 in September and two in October, the last on 5th.

Svarthätta Blackcap (*Sylvia atricapilla*) 296(160.3)

The first of 13 in April was on 24th. There were 48 in May, 10 in June, 17 in July, 42 in August, 148 in September and 18 in October, the last on 27th. This is the second highest annual total since standardised ringing began.

Lundsångare Greenish Warbler (*Phylloscopus trochiloides*) 2(1.4)

There were two ringed this year; one on 1st June and the other on 12th August.

Kungsfågelsångare Pallas's Warbler (*Phylloscopus proregulus*) 2(1.3)

There were two ringed in October; on 8th and 31st, these were the first since 2017.

Tajgasångare Yellow-browed Warbler (*Phylloscopus inornatus*) 17(1.5)

The first of 13 in September was on 2nd, the earliest record for Landsort (the previous was on 7th September 2018). There were four in October, the last on 7th. The highest day total was 7 on 26th. This is the highest annual total for Landsort, reflecting an influx of the species across Europe this autumn.

Videsångare Radde's Warbler (*Phylloscopus schwartzi*) 1(0.1)

One ringed on 7th October was the third to be ringed on Landsort.

Grönsångare Wood Warbler (*Phylloscopus sibilatrix*) 10(11.2)

The first of two in May was ringed on 2nd. There were three in July, four in August and the last on 1st September. This is the lowest total since standardised ringing began.

Gransångare Common Chiffchaff (*Phylloscopus collybita*) 409(116.7)

The first of 120 in April was on 5th, there were 91 in May, 10 in June, two in August, 115 in September and 71 in October with the last on 27th. This is the highest annual total for the species.

Sibirisk gransångare Siberian Chiffchaff (*Phylloscopus collybita tristis*) 4 (2.7)

Two were ringed on 14th June, coinciding with at least one singing individual present for several days. One was ringed on 27th October and one on 9th November.

Lövsångare Willow Warbler (*Phylloscopus trochilus*) 1106(737.1)

The first of 15 in April was ringed on 19th. There were 438 in May, 33 in June, 28 in July (the first juveniles on 23rd), 329 in August (the highest day total 113 on 28th), 259 in September and four in October, the last on 10th. This is the highest annual total since standardised ringing began.

Kungsfågel Goldcrest (*Regulus regulus*) 3936(1782.9)

The first six of 10 in March was ringed on 26th. There were 117 in April and four in May, with the last two on 3rd. The first of 20 in August was ringed on 16th, followed by exceptional monthly totals of 1577 in September and 2203 in October. The migration peak occurred from 26th September-10th October, during this period 2939 were ringed - more than were ringed during 2018 and 2019 combined! The highest day total was 473 on 2nd October. Five were ringed in November, the last on 11th. This is the highest annual total for the species.

Brandkronad kungsfågel Firecrest (*Regulus ignicapilla*) 1(0.3)

One was ringed on 21st April. This is the tenth to be ringed on Landsort, all but two of which have been in the past 10 years, mirroring their northward range expansion.

Grå flugsnappare Spotted Flycatcher (*Muscicapa striata*) 52(51.6)

The first four of 18 in May were on 22nd. There were six in June, 15 in August (the first juvenile on 12th) and 13 in September, the last on 11th. Breeding was confirmed on the island with at least two broods of newly fledged young seen at different locations. After two years with lower totals in the 30s, this year saw a more average number ringed.

Mindre flugsnappare Red-breasted Flycatcher (*Ficedula parva*) 8(6.6)

The first of seven in May was on 21st and the only autumn bird was on 23rd September. This is the lowest total since standardised ringing began.

Halsbandsflugsnappare Collared Flycatcher (*Ficedula albicollis*) 2(1.2)

As with last year, two were caught on the same day – May 2nd, both adult males.

Svartvit flugsnappare Pied Flycatcher (*Ficedula hypoleuca*) 44(50.9)

The first of two in April was on 25th. There were 25 in May, two in July, 11 in August and four in September, the last on 14th.

Skäggmes Bearded Reedling (*Panurus biarmicus*) 11(3.3)

Five ringed on 13th October, followed by three on 17th, two on 6th November and one on 8th were the first since 2018.

Stjärtmes Long-tailed Tit (*Aegithalos caudatus*) 22(67.5)

There were four ringed on 17th October, eight on 20th and 10 on 23rd were the first since 2018.

| | | | |
|---------------|-----------|----------------------------|--------|
| Entita | Marsh Tit | <i>(Poecile palustris)</i> | 3(7.4) |
|---------------|-----------|----------------------------|--------|

The first of three was ringed on 8th July, with one on 15th and one on 22nd August, all juveniles. The first since 2018.

| | | | |
|----------------|-------------|--------------------------------|--------|
| Tofsmes | Crested Tit | <i>(Lophophanes cristatus)</i> | 1(0.2) |
|----------------|-------------|--------------------------------|--------|

The sixth to be ringed on Landsort was a juvenile caught on 15th June.

| | | | |
|-----------------|----------|-------------------------|----------|
| Svartmes | Coal Tit | <i>(Pariparus ater)</i> | 31(33.9) |
|-----------------|----------|-------------------------|----------|

The first of 29 in September was ringed on 19th (the highest day total was 17 on 28th). Two were ringed in October, both on 12th.

| | | | |
|---------------|----------|------------------------------|----------|
| Blåmes | Blue Tit | <i>(Cyanistes caeruleus)</i> | 467(242) |
|---------------|----------|------------------------------|----------|

The only bird in March was ringed on 26th. There were eight in April, one in May, 12 in June (the first pulli were ringed in nestboxes on 3rd June), 11 in July, three in August, 54 in September, 348 in October and 19 in November, the last on 12th.

| | | | |
|----------------|-----------|----------------------|------------|
| Talgoxe | Great Tit | <i>(Parus major)</i> | 360(209.3) |
|----------------|-----------|----------------------|------------|

The first of five in March was ringed on 26th. There were three in April, two in May, 231 in June (the first pulli were ringed in nestboxes on 1st and make up the majority of the month total), 27 in July, eight in August, 24 in September, 52 in October and eight in November, the last on 10th.

| | | | |
|-----------------|----------|-------------------------|---------|
| Nötväcka | Nuthatch | <i>(Sitta europaea)</i> | 13(5.1) |
|-----------------|----------|-------------------------|---------|

The first of nine in June was ringed on 1st. There were two in July, one in September and the last on 23rd October.

| | | | |
|---------------------|-------------|-----------------------------|----------|
| Trädskrypare | Treecreeper | <i>(Certhia familiaris)</i> | 91(81.5) |
|---------------------|-------------|-----------------------------|----------|

There were two ringed in March, on 26th and 27th. Five in June, the first two juveniles ringed on 9th, two in July, one in August, 13 in September, 67 in October and the last on 11th November.

| | | | |
|------------------|-------------------|--------------------------|----------|
| Törnskata | Red-backed Shrike | <i>(Lanius collurio)</i> | 40(45.8) |
|------------------|-------------------|--------------------------|----------|

The first two of 13 in May were ringed on 16th. There were two in June, two in July and 23 in August, the last two on 28th. This is the second lowest total since the start of standardised ringing.

| | | | |
|-----------------|-------------------|---------------------------|--------|
| Varfågel | Great Grey Shrike | <i>(Lanius excubitor)</i> | 5(1.6) |
|-----------------|-------------------|---------------------------|--------|

The first was ringed on 25th April, only the fourth in spring out of the total 57 ringed. There were three in October, on 3rd, 12th and 30th. This total equals the previous highest years of 1989, 2013 and 2019.

| | | | |
|--------------|--------|--------------------|--------|
| Skata | Magpie | <i>(Pica pica)</i> | 1(0.8) |
|--------------|--------|--------------------|--------|

A second calendar year was ringed on 26th April, the 26th ringed on Landsort.

Kaja Western Jackdaw (*Coloeus monedula*) 3(0.3)

There were three were ringed this year, the 12th-14th ringed on Landsort, all of which have been since 2012. The first was an adult female with a brood patch on 9th May and two newly fledged juveniles were ringed on 8th June.

Stare Starling (*Sturnus vulgaris*) 56(23.2)

An adult was ringed on 14th May, a further 41 ringed during May were pulli in nestboxes ringed on 25th and 26th. There were 14 during June, with the last four on 22nd.

Pilfink Tree Sparrow (*Passer montanus*) 63(33.1)

The only adult of the year was ringed on 21st April. The first of 15 in June was on 5th. There were 17 in July, 29 in August and the last on 15th September. This is the lowest total since the start of the standardised period.

Bofink Chaffinch (*Fringilla coelebs*) 127(160.7)

The first four were ringed on 26th March. There were 17 in April, 10 in May, 20 in June, 12 in July, 10 in August, 43 in September, five in October and six in November, the last on 11th. This is the lowest total since the start of the standardised period.

Bergfink Brambling (*Fringilla montifringilla*) 16(41.6)

The one individual in spring was ringed on 10th April. There were 11 on 19th September, singles on 8th and 10th October and the last two on 4th November.

Grönfink Greenfinch (*Chloris chloris*) 93(228.6)

The first of two in April was on 20th. There were three in May, 21 in June, 33 in July, eight in August, five in September, 17 in October and four in November, the last on 11th. This is the second lowest total since the start of the standardised period.

Steglits Goldfinch (*Carduelis carduelis*) 31(4.6)

The first of four in April was on 8th. There was one in May, six in June, 18 in July and two in October, the last on 12th. A historically scarce species which has seen an increase in numbers ringed in recent years. This is the highest annual total.

Grönsiska Siskin (*Spinus spinus*) 373(149.8)

The first two of four in May were ringed on 2nd, including the first juvenile. There were 13 in June, 19 in August, 251 in September, 85 in October and the last on 9th November. This is an irruptive species that can vary significantly in numbers year on year.

Hämpling Linnet (*Linaria cannabina*) 57(16.7)

The first of five in April was ringed on 15th. There were nine in May, 20 in June, 19 in July and four in August, the last on 15th. This is the second highest annual total.

Gråsiska Redpoll (*Acanthis flammea*) 2354(479.6)

The annual total of 2354 is the combined total for Redpoll (Gråsiska). The two subspecies of Redpoll, as well as intermediate birds (not assigned to either subspecies) are treated separately below. At the beginning of the autumn migration period Lesser Redpoll was the most numerous subspecies, Mealy Redpoll becoming more numerous later on. This is an irruptive species that can vary significantly year on year.

Brunsiska Lesser Redpoll (*Acanthis flammea cabaret*) 742(114.6)

There were two in spring, one ringed on 27th March and one 15th April. There were 82 in September, the first on 11th, 620 in October and 38 in November, the last on 10th.

Gråsiska Mealy Redpoll (*Acanthis flammea flammea*) 776(119.7)

The first of 47 in September was ringed on 11th. There were 588 in October and 141 in November, the last on 10th.

Brunsiska/Gråsiska Lesser/Mealy Redpoll (*Acanthis flammea cabaret/flammea*) 836(245.2)

One on 13th July, five in August, 338 in September and 468 in October.

Snösiska Coues' Arctic Redpoll (*Acanthis hornemanni exilipes*) 6(4.3)

Six ringed in October, three on 30th and 31st. These were the first since 2017.

Mindre korsnäbb Red Crossbill (*Loxia curvirostra*) 1(0.4)

The 13th to be ringed on Landsort was a juvenile ringed on 25th June.

Rosenfink Scarlet Rosefinch (*Carpodacus erythrinus*) 14(17.1)

The first of two in May was ringed on 25th. There were six in June, four in July and two in August, the last on 28th. The second lowest total since standardised ringing began.

Domherre Bullfinch (*Pyrrhula pyrrhula*) 124(53.8)

The only spring bird was on 26th March. The first 12 of 99 in October was on 10th, the peak day was 44 on 13th. There were 24 in November with the last two on 10th. This is the second highest total since the start of the standardised period.

Gulsparv Yellowhammer (*Emberiza citrinella*) 58(60.3)

The first of two in April was on 8th. There were 12 in May (the first juvenile on 24th May), five in June, 11 in July, 22 in August, three in September, two in October and the last on 8th November.

Sävsparv Reed Bunting (*Emberiza schoeniclus*) 37(78.2)

The first of 15 in April was on 1st. There were three in May, one in June, one in September, 16 in October and the last on 4th November.

Table of birds ringed in 2020

| Art | Species | Scientific | Total |
|-----------------------------|--------------------|---|-------|
| Kungsfågel | Goldcrest | <i>Regulus regulus</i> | 3936 |
| Rödhake | Robin | <i>Erithacus rubecula</i> | 1901 |
| Lövsångare | Willow Warbler | <i>Phylloscopus trochilus</i> | 1106 |
| Gråsiska | Redpoll | <i>Acanthis flammea cabaret/flammea</i> | 836 |
| Gråsiska (<i>flammea</i>) | Mealy Redpoll | <i>Acanthis flammea flammea</i> | 776 |
| Brunsiska (cabaret) | Lesser Redpoll | <i>Acanthis flammea cabaret</i> | 742 |
| Ärtsångare | Lesser Whitethroat | <i>Sylvia curruca</i> | 701 |
| Blåmes | Blue Tit | <i>Cyanistes caeruleus</i> | 467 |
| Gransångare | Chiffchaff | <i>Phylloscopus collybita</i> | 409 |
| Grönsiska | Siskin | <i>Spinus spinus</i> | 373 |
| Talgoxe | Great Tit | <i>Parus major</i> | 360 |
| Gärdsmyg | Wren | <i>Troglodytes troglodytes</i> | 309 |
| Svarthätta | Blackcap | <i>Sylvia atricapilla</i> | 296 |
| Taltrast | Song Thrush | <i>Turdus philomelos</i> | 215 |
| Koltrast | Blackbird | <i>Turdus merula</i> | 198 |
| Röstjärt | Redstart | <i>Phoenicurus phoenicurus</i> | 153 |
| Törnsångare | Whitethroat | <i>Sylvia communis</i> | 131 |
| Bofink | Chaffinch | <i>Fringilla coelebs</i> | 127 |
| Domherre | Bullfinch | <i>Pyrrhula pyrrhula</i> | 124 |
| Järnsparv | Dunnock | <i>Prunella modularis</i> | 103 |
| Grönfink | Greenfinch | <i>Chloris chloris</i> | 93 |
| Trädkrypare | Treecreeper | <i>Certhia familiaris</i> | 91 |
| Trädgårdssångare | Garden Warbler | <i>Sylvia borin</i> | 74 |
| Sädesärta | White Wagtail | <i>Motacilla alba</i> | 71 |
| Rödvingetrast | Redwing | <i>Turdus iliacus</i> | 64 |
| Pilfink | Tree Sparrow | <i>Passer montanus</i> | 63 |
| Härmsångare | Icterine Warbler | <i>Hippolais icterina</i> | 61 |
| Gulspurv | Yellowhammer | <i>Emberiza citrinella</i> | 58 |
| Hämpling | Linnet | <i>Linaria cannabina</i> | 57 |
| Stare | Starling | <i>Sturnus vulgaris</i> | 56 |
| Grå flugsnappare | Spotted Flycatcher | <i>Muscicapa striata</i> | 52 |
| Svartvit flugsnappare | Pied Flycatcher | <i>Ficedula hypoleuca</i> | 44 |
| Törnskata | Red-backed Shrike | <i>Lanius collurio</i> | 40 |
| Sävspurv | Reed Bunting | <i>Emberiza schoeniclus</i> | 37 |
| Rörsångare | Reed Warbler | <i>Acrocephalus scirpaceus</i> | 32 |
| Svartmes | Coal Tit | <i>Parus ater</i> | 31 |
| Steglits | Goldfinch | <i>Carduelis carduelis</i> | 31 |
| Näktergal | Thrush Nightingale | <i>Luscinia luscinia</i> | 27 |
| Blåhake | Bluethroat | <i>Luscinia svecica</i> | 26 |
| Sidensvans | Waxwing | <i>Bombycilla garrulus</i> | 23 |
| Stjärtmes | Long-tailed Tit | <i>Aegithalos caudatus</i> | 22 |

| | | | |
|------------------------------|-------------------------------|---------------------------------------|----|
| Ängsplärka | Meadow Pipit | <i>Anthus pratensis</i> | 18 |
| Ladusvala | Barn Swallow | <i>Hirundo rustica</i> | 17 |
| Tajgasångare | Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 17 |
| Kärrsångare | Marsh Warbler | <i>Acrocephalus palustris</i> | 16 |
| Bergfink | Brambling | <i>Fringilla montifringilla</i> | 16 |
| Göktyta | Wryneck | <i>Jynx torquilla</i> | 15 |
| Sävsångare | Sedge Warbler | <i>Acrocephalus schoenobaenus</i> | 15 |
| Trädpiplärka | Tree Pipit | <i>Anthus trivialis</i> | 14 |
| Rosenfink | Scarlet Rosefinch | <i>Carpodacus erythrinus</i> | 14 |
| Buskskvätta | Whinchat | <i>Saxicola rubetra</i> | 13 |
| Björktrast | Fieldfare | <i>Turdus pilaris</i> | 13 |
| Nötväcka | Nuthatch | <i>Sitta europaea</i> | 13 |
| Stenskvätta | Northern Wheatear | <i>Oenanthe oenanthe</i> | 12 |
| Större hackspett | Great Spotted Woodpecker | <i>Dendrocopos major</i> | 11 |
| Skäggmes | Bearded Reedling | <i>Panurus biarmicus</i> | 11 |
| Grönsångare | Wood Warbler | <i>Phylloscopus sibilatrix</i> | 10 |
| Sparvhök | Sparrowhawk | <i>Accipiter nisus</i> | 9 |
| Mindre flugsnappare | Red-breasted Flycatcher | <i>Ficedula parva</i> | 8 |
| Snösiska (<i>exilipes</i>) | Coues' Arctic Redpoll | <i>Acanthis hornemanni exilipes</i> | 6 |
| Varfågel | Great Grey Shrike | <i>Lanius excubitor</i> | 5 |
| Hussvala | House Martin | <i>Delichon urbicum</i> | 4 |
| Busksångare | Blyth's Reed Warbler | <i>Acrocephalus dumetorum</i> | 4 |
| Sibirisk gransångare | Chiffchaff (<i>Tristis</i>) | <i>Phylloscopus collybita tristis</i> | 4 |
| Entita | Marsh Tit | <i>Poecile palustris</i> | 3 |
| Kaja | Jackdaw | <i>Pica pica</i> | 3 |
| Lärkfalk | Eurasian Hobby | <i>Falco subbuteo</i> | 2 |
| Skrattmås | Black-headed Gull | <i>Chroicocephalus ridibundus</i> | 2 |
| Nattskärja | European Nightjar | <i>Caprimulgus europaeus</i> | 2 |
| Lundsångare | Greenish Warbler | <i>Phylloscopus trochiloides</i> | 2 |
| Kungsfågelsångare | Pallas's Leaf Warbler | <i>Phylloscopus proregulus</i> | 2 |
| Halsbandsflugsnappare | Collared Flycatcher | <i>Ficedula albicollis</i> | 2 |
| Silvertärna | Arctic Tern | <i>Sterna paradisica</i> | 1 |
| Gök | Cuckoo | <i>Cuculus canorus</i> | 1 |
| Tornseglare | Common Swift | <i>Apus apus</i> | 1 |
| Mindre hackspett | Lesser Spotted Woodpecker | <i>Dryobates minor</i> | 1 |
| Gulärta | Yellow Wagtail | <i>Motacilla flava</i> | 1 |
| Ringtrast | Ring Ouzel | <i>Turdus torquatus</i> | 1 |
| Gräshoppsångare | Grasshopper Warbler | <i>Locustella naevia</i> | 1 |
| Videsångare | Radde's Warbler | <i>Phylloscopus schwartzi</i> | 1 |
| Brandkronad kungsfågel | Firecrest | <i>Regulus ignicapilla</i> | 1 |
| Tofsmes | Crested Tit | <i>Lophophanes cristatus</i> | 1 |
| Skata | Magpie | <i>Coloeus monedula</i> | 1 |
| Mindre korsnäbb | Red Crossbill | <i>Loxia curvirostra</i> | 1 |

Species with an annual ringing total higher than in previous years

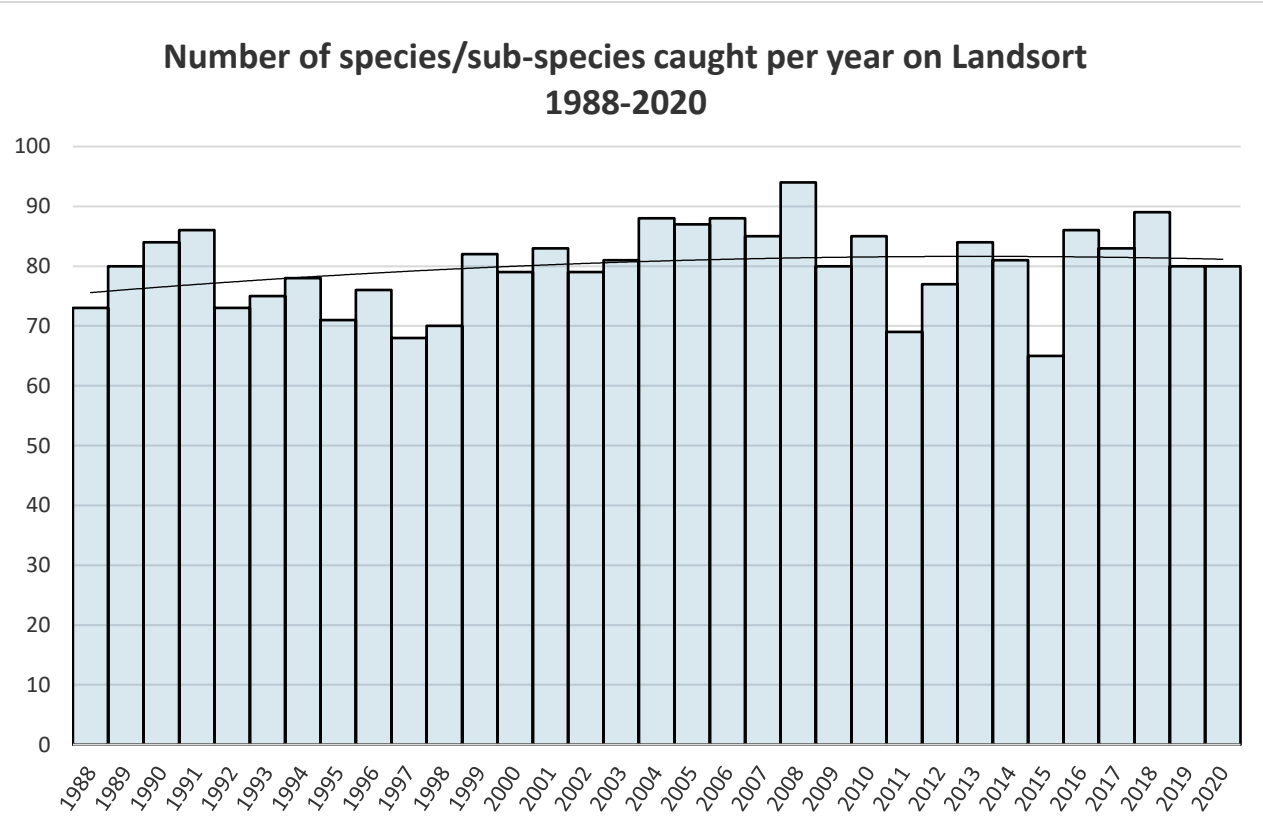
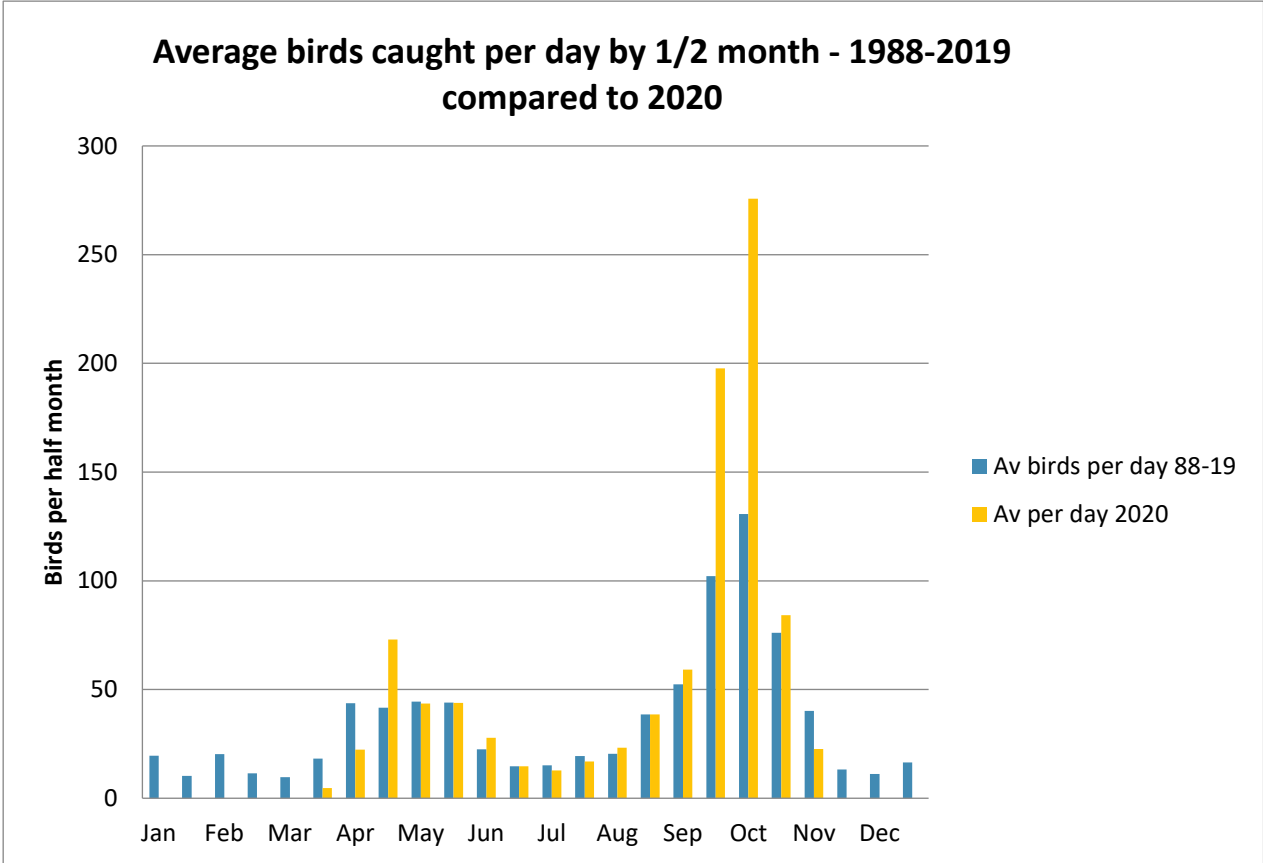
| Species | | | 2020 |
|--------------------|-----------------------|---------------------------------|------|
| Swedish | English | Scientific | |
| Lärkfalk | Hobby | <i>Falco subbuteo</i> | 2 |
| Nattskärra | European Nightjar | <i>Caprimulgus europaeus</i> | 2 |
| Sädesärta | White Wagtail | <i>Motacilla alba</i> | 71 |
| Gärdsmyg | Wren | <i>Troglodytes troglodytes</i> | 309 |
| Koltrast | Blackbird | <i>Turdus merula</i> | 198 |
| Busksångare | Blyth's Reed Warbler | <i>Acrocephalus dumetorum</i> | 4 |
| Ärtsångare | Lesser Whitethroat | <i>Sylvia curruca</i> | 701 |
| Tajgasångare | Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 17 |
| Gransångare | Chiffchaff | <i>Phylloscopus collybita</i> | 409 |
| Kungsfågel | Goldcrest | <i>Regulus regulus</i> | 3936 |
| Steglits | Goldfinch | <i>Carduelis carduelis</i> | 31 |
| Gråsiska (flammea) | Common Redpoll | <i>Acanthis flammea flammea</i> | 776 |
| Gråsiska (cabaret) | Lesser Redpoll | <i>Acanthis flammea cabaret</i> | 742 |

Species with a ringing day total higher than in previous years (all autumn records)

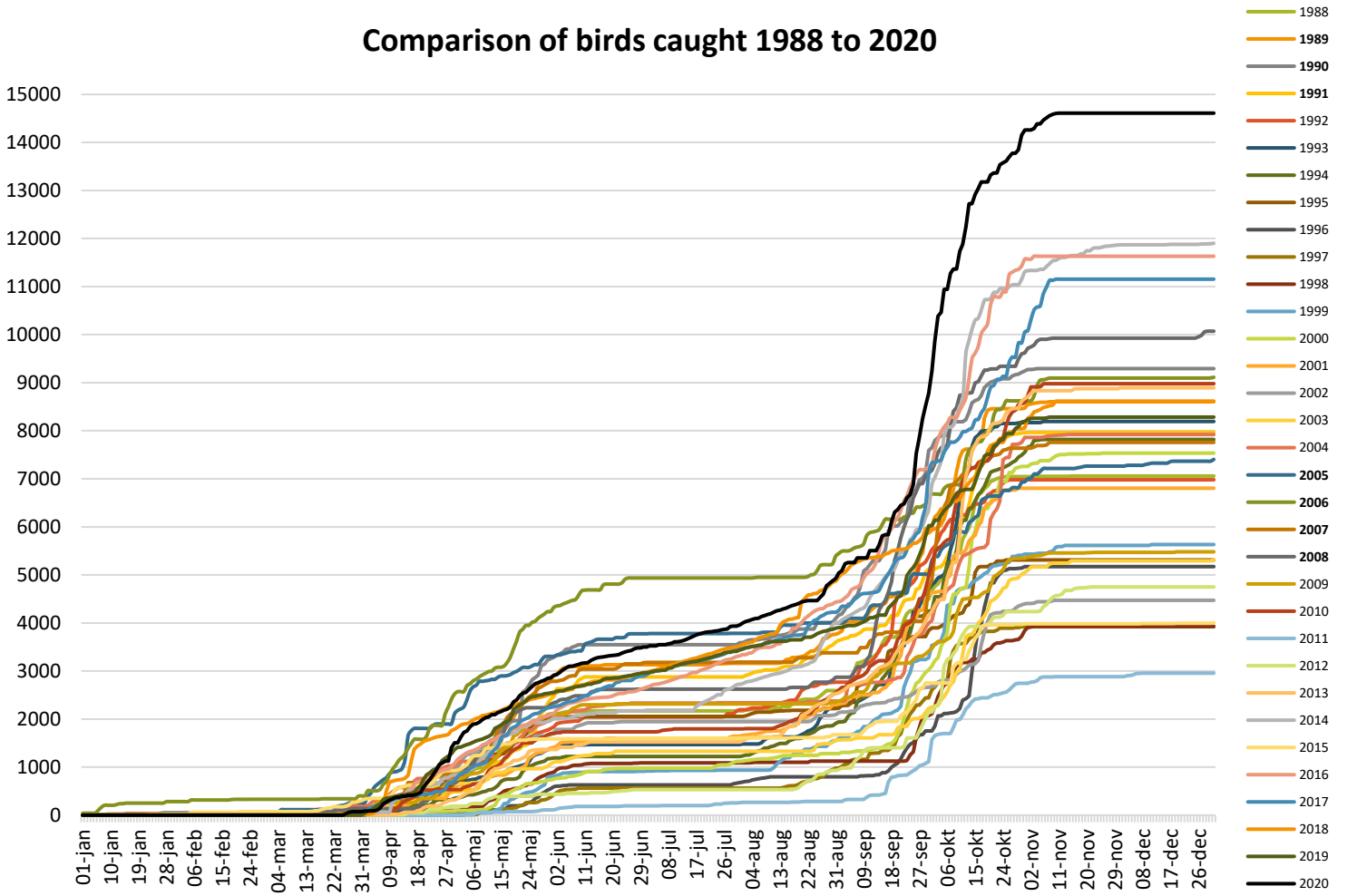
| Species | | | 2020 |
|--------------|-----------------------|--------------------------------|------|
| Swedish | English | Scientific | |
| Ängsplärka | Meadow Pipit | <i>Anthus pratensis</i> | 15 |
| Gärdsmyg | Wren | <i>Troglodytes troglodytes</i> | 61 |
| Tajgasångare | Yellow-browed Warbler | <i>Phylloscopus inornatus</i> | 7 |
| Gransångare | Chiffchaff | <i>Phylloscopus collybita</i> | 46 |

Species with 10 or less individuals ringed on Landsort

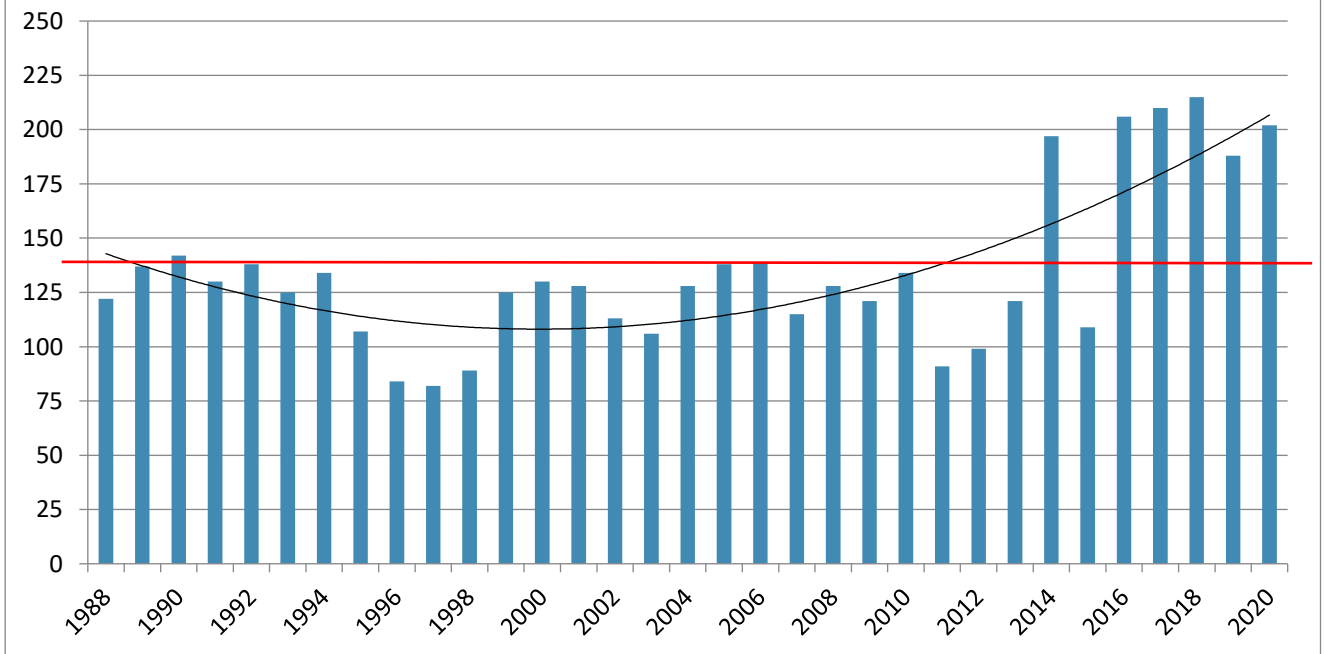
| Species | | | Ringed in 2020 | Total 1978 - 2020 |
|------------------------|-------------------|------------------------------|----------------|-------------------|
| Swedish | English | Scientific | | |
| Lärkfalk | Hobby | <i>Falco subbuteo</i> | 2 | 4 |
| Nattskärra | European Nightjar | <i>Caprimulgus europaeus</i> | 2 | 5 |
| Tornseglare | Common Swift | <i>Apus apus</i> | 1 | 5 |
| Ringtrast | Ring Ouzel | <i>Turdus torquatus</i> | 1 | 5 |
| Videsångare | Radde's Warbler | <i>Phylloscopus schwarzi</i> | 1 | 3 |
| Brandkronad kungsfågel | Firecrest | <i>Regulus ignicapilla</i> | 1 | 10 |
| Tofsmes | Crested Tit | <i>Lophophanes cristatus</i> | 1 | 6 |



Comparison of birds caught 1988 to 2020



Days per year - 1988-2020



Nest box summary

A total of 260 nest boxes are located within the woods on the island as part of a long term monitoring project. While monitoring of occupancy of the boxes has not always taken place, annual monitoring has taken place in the years 2016-2020. In the current year, 226 boxes were visited. The boxes not visited either need replacing due to deterioration, are designed for species which are prone to deserting if disturbed or could not be located due to vegetation etc.

81 of the boxes checked were active. Unsuccessful attempts ranged from boxes with just a small amount of nesting material, to eggs that did not hatch and a few broods which died prior to fledging. 68 broods were successful with at least one chick reared through to fledging.

11 boxes were occupied by Starling (Stare) and 43 chicks were ringed from the 10 successful nesting attempts. Sixty-eight boxes were occupied by tits (mes). Great Tit (Talgoxe) accounted for the majority of these, with 170 chicks ringed from 50 successful broods. This year there were also four successful Blue Tit (Blåmes) nests, with six chicks ringed, an improvement on last year when no nests from this species were located. Several nests with evidence of use by tits (mes) were not assigned to either Great Tit (Talgoxe) or Blue Tit (Blåmes), either boxes found with a small amount of nesting material added or in two cases, nests located after fledging. There was one brood of Tree Sparrow (Pilfink) which was successful – due to the structure of the nest the chicks could not be accessed for ringing. One brood of Goldeneye (Knipa) was located in a box at Norra Lunden, the only wildfowl nest this year. A number of chicks are presumed to have fledged from this box and one dead chick was found in the box after it had been vacated.

Table of nest box occupancy during spring 2020

| Species | Total of occupied boxes | Unsuccessful nesting attempt | Boxes with chicks through to fledging | Total number of chicks ringed |
|---|-------------------------|------------------------------|---------------------------------------|--|
| Great Tit (Talgoxe) | 53 | 3 | 50 | 170 |
| Blue Tit (Blåmes) | 4 | 0 | 4 | 6 |
| Great Tit / Blue Tit (Talgoxe / Blåmes) | 11 | 9 | 2 | 0 |
| Starling (Stare) | 11 | 1 | 10 | 43 |
| Waterfowl | 1 | 0 | 1 | 0 |
| Tree Sparrow (Pilfink) | 1 | 0 | 1 | Could not be accessed without damaging structure of the nest |
| Total | 81 | 13 | 68 | 219 |

Swift (Tornseglare) nest boxes on the Fågelstation building

In 2017, ten additional nest boxes were placed on a north-facing wall of the Fågelstation, designed to provide nesting opportunities for Swift (Tornseglare). After some exploratory visits in 2017, birds returned in 2018 and an unsuccessful breeding attempt (2 eggs) was confirmed in one box. Two chicks were raised from two different boxes during 2019, one of which fledged successfully. This year, after arriving back at the boxes in early June, two pairs again nested in two of the boxes. Both of which raised chicks through to fledging in late August. In addition to the two nesting pairs, prospecting individuals were also seen visiting the boxes with up to 14 seen simultaneously interacting with the nesting colony in late June.



Swift (Tornseglare) ©Espen Quinto-Ashman

Monthly summary of bird sightings on Landsort in 2020

April

The first migrants arriving during the first ten days of the month were Chiffchaff (Gransångare), Wheatear (Stenskvätta), Osprey (Fiskgjuse) and Swallow (Ladusvala). North-westerly winds then hindered migration until later in the month, with large arrivals of common migrants in the ultimate days.

Highlights included:

- 15th – 1 Ring Ouzel (Ringtrast) at Bredmar
- 20th – 23 Red-necked Grebe (Gråhakedopping) migrated past Södra Udden
- 22nd – 1 King Eider (Praktejder) off Södra Udden
- 23rd – 1 Pallid Harrier (Stäpphök) migrated south past Södra Udden
- 24th – 1 Serin (Gulhämpling) migrating at Södra Udden
- 27th – 1 Stejneger's Scoter (Sibirisk knölsvärta) migrated past Södra Udden
- 27th - 3108 Velvet Scoter (Svärta) and 2068 Common Scoter (Sjörre), peak counts migrating past Södra Udden



Pallid Harrier (Stäpphök) ©Espen Quinto-Ashman



Stejneger's Scoter (Sibirisk knölsvärta) ©Espen Quinto-Ashman

May

Migrants arrived throughout the month at a steady pace, with generally favourable weather conditions. Wader passage began to increase in the ultimate days of the month with the first significant numbers of species such as Grey Plover (Kustpipare), Dunlin (Kärrensnäppa) and Knot (Kustsnäppa).

Highlights included:

- 2nd – 1 Stejneger's Scoter (Sibirisk knölsvärta) migrated past Södra Udden
- 2nd – 2 Collared Flycatcher (Halsbandsflugsnappare) ringed at Bredmar
- 4th – 1 Collared Flycatcher (Halsbandsflugsnappare) at Fårhagen
- 6th – 1 Ring Ouzel (Ringtrast) at Södra Udden
- 8th – 1 Nightjar (Nattskärta) at Bredmar
- 9th and 10th – 1 Ortolan Bunting (Ortolansparv) at Södra Udden
- 17th and 29th – 1 Honey Buzzard (Bivråk), both flew north over Bredmar
- 18th – 1 Ring Ouzel (Ringtrast) at Norrhamn
- 19th – 1 Penduline Tit (Pungmes) at Bredmar
- 23rd – 2 Kittiwake (Tretåig mås) migrated past Södra Udden
- 23rd – 1 White-billed Diver (Vitnäbbad islom) migrated past Södra Udden
- 26th and 31st – 1 Blyth's Reed Warbler (Busksångare), both ringed at Bredmar
- 29th – 1 Greenish Warbler (Lundsångare) singing at Våta Vägen
- 30th – 3 Nightjar (Nattskärta) migrating at Södra Udden
- 31st – 1 Red-necked Phalarope (Smalnäbbad simmsnäppa) migrated past Södra Udden



Blyth's Reed Warbler (Busksångare) ©Espen Quinto-Ashman

June

Long distance migrants continued to arrive during the first part of the month. Fledglings from earlier breeding birds became more evident throughout the month. Up to three Greenish Warblers (Lundsångare) were singing near Våta Vägen.

Highlights included:

- 2nd – 1 White-billed Diver (Vitnäbbad islom) migrated past Södra Udden
- 3rd - 1 Stejneger's/Siberian Stonechat / (Amur/Vitgumpad buskskvätta) at Saltmar
- 6th – 1 Pomarine Skua (Bredstjärtad labb) migrated northeast
- 8th – 1 Red-footed Falcon (Aftonfalk) migrated north past Södra Udden
- 8th – 2 Avocet (Skärfläcka) migrated west past Södra Udden
- 8th – 2 Sandwich Tern (Kentsk tärna) migrated past Södra Udden
- 9th – 1 Avocet (Skärfläcka) migrated south
- 9th – 1 Blyth's Reed Warbler (Busksångare) ringed at Bredmar
- 15th – 1 Crested Tit (Tofsmes) ringed at Bredmar
- 21st – 1 Hawfinch (Stenknäck) flew north over Bredmar
- 22nd – 2 Sandwich Tern (Kentsk tärna) migrated past Södra Udden
- 28th - 1 Honey Buzzard (Bivråk) flew over Bredmar



Red Crossbill (Mindre korsnäbb) ©Espen Quinto-Ashman

July

Small numbers of waders were seen and heard migrating southwest from the beginning of the month, gradually increasing into the middle of the month. On 22nd 936 Black-headed Gull (Skrattmåås) were recorded migrating southwest across the island (this is historically one of the peak migration dates for the species on Landsort). Three Greenish Warbler (Lundsångare) were seen near Våta Vägen, two of which were singing males.

Highlights included:

- 9th – 1 Temminck's Stint (Mosnäppa) migrated southwest over Bredmar
- 9th – 5 Great-crested Grebe (Skäggdopping) migrated southwest past Vadarbunkern
- 10th – 2 Great-crested Grebe (Skäggdopping) migrated southwest past Södra Udden
- 10th – 1 Avocet (Skärfläcka) migrated south past Södra Udden
- 25th - 1 Garganey (Årta) migrated southwest past Södra Udden
- 25th – 4 Sanderling (Sandlöpare) migrated southwest past Södra Udden
- 26th – 1 Sandwich Tern (Kentsk tärna) migrated southwest past Södra Udden



Whitethroat (Törnsångare) ©Espen Quinto-Ashman

August

Wader migration continued at a steady rate throughout the month. Towards the end of the month, a large increase in migrant warblers became evident, primarily constituting of Willow Warbler (Lövsångare).

Highlights included:

- 1st – 1 Blyth's Reed Warbler (Busksångare) ringed at Bredmar
- 7th – 1 Nightjar (Nattskärja) ringed at Bredmar
- 8th – 5 Garganey (Årta) migrated southwest past Vadarbunkern
- 8th – 1 Great Egret (Ägretthäger) migrated west over Norra Udden
- 13th – 1 Two-barred Crossbill (Bändelkorsnäbb) flew north over Fågelstationen
- 15th – 1 Great-crested Grebe (Skäggdopping) migrated southwest past Södra Udden
- 16th – 1 Two-barred Crossbill (Bändelkorsnäbb) around Fågelstationen during morning
- 18th – 1 Great-crested Grebe (Skäggdopping) flew past Södra Udden
- 18th – 4 Red-necked Grebe (Gråhakedopping) flew past Södra Udden
- 19th – 3 Nutcracker (Nötkråka) flew south to Södra Udden then returned to the north
- 28th – 3 Garganey (Årta) flew past Södra Udden
- 28th – 3 Red-necked Grebe (Gråhakedopping) flew past Södra Udden
- 31st – 1 Honey Buzzard (Bivråk): juvenile flew south over Fågelstationen



Nightjar (Nattskärja) ©Espen Quinto-Ashman



Migrating ducks ©Espen Quinto-Ashman

September

Willow Warbler (Lövsångare) predominated for the first few days of the month and the first Yellow-browed Warbler (Tajgasångare) on 2nd is the earliest record for Landsort. Species composition began to change later in the month with Goldcrest (Kungsfågel) and Robin (Rödhake) becoming the most numerous passerine migrants. From 26th, the wind direction changed to prevailing easterlies, leading to a large influx of these species.

Highlights included:

- 2nd - 1 Yellow-browed Warbler (Tajgasångare) ringed at Bredmar, the earliest record for Landsort and the first of many this month
- 17th – 1 Red-throated Pipit (Rödstrupig piplärka) migrated south at Fyren
- 18th – 1 Tawny Pipit (Fältpiplärka) at Norrudden
- 19th – 1 Two-barred Crossbill (Bändelkorsnäbb) migrated north at Norrudden
- 19th – 2 Rustic Bunting (Videsparv), one migrated north at Norrudden and another present
- 23rd – 1 Great Snipe (Dubbelbeckasin) at Saltmar
- 26th - 1 Red-throated Pipit (Rödstrupig piplärka) migrating



Coal Tit (Svartmes) ©Espen Quinto-Ashman

October

The exceptional influx of Goldcrest (Kungsfågel) continued apace during the first part of the month. Several Red-flanked Bluetail (Tajga blåstjärt) were seen throughout the island during this period, reflecting their record breeding season in Scandinavia this year. On the 30th, two Pallid Swift (Blek tornseglare) were seen around the south of the island, if accepted this will become the first record of the species for Södermanland. There were peak counts of 2670 Barnacle Geese (Vitkindad gäss), 4287 Brent Geese (prutgäss) and 5791 Eurasian White-fronted Geese (Bläsgäss). On 3rd a Red-breasted Goose (Röd Halsad gås) migrating southwest was the second recorded on Landsort.

Highlights included:

- 1st – 1 Red-flanked Bluetail (Tajga blåstjärt) and 1 Bluethroat (Blåhake) at Södra Udden
- 2nd – 1 Red-flanked Bluetail (Tajga blåstjärt) in Byn
- 3rd – 1 Pallas's Warbler (Kungsfågelsångare) in Byn, present several days
- 3rd – 1 Red-breasted Goose (Röd Halsad gås) migrated southwest
- 3rd – 3 Lesser White-fronted Goose (Fjällgås) migrated southwest with Eurasian White-fronted Geese (Bläsgäss)
- 3rd – 1 Lapland Bunting (Lappsparv) on the West Coast
- 4th – 1 Black Kite (Brunglada) flew to Södra Udden and returned to the north
- 5th – 1 Little Bunting (Dvärgsparv) and 1 Hawfinch (Stenknäck) flew south over Fågelstationen
- 5th – 4 Pink-footed Goose (Spetsbergsgås) migrated southwest
- 7th – 1 Radde's Warbler (Videsångare) ringed at Bredmar
- 8th – 1 Pallas's Warbler (Kungsfågelsångare) ringed at Bredmar
- 8th – 1 Red-flanked Bluetail (Tajga blåstjärt) at Våta Vägen
- 8th – 1 Dusky Warbler (Brunsångare) near Norrhamn, present two days
- 8th – 1 Arctic Redpoll (Snösiska) at Bredmar
- 9th – 1 Pallas's Warbler (Kungsfågelsångare) at Fyren
- 10th – 1 Great Egret (Ägretthäger) over Bredmar

- 11th – 1 Smew (Salskrake) and 48 Scaup (Bergand) flew southwest past Södra Udden
- 11th – 1 Richard’s Pipit (Större piplärka) southwest over Bredmar
- 13th – a flock of Bearded Tit (Skägges) in the reedbed at Bredmar, present several days
- 25th – 1 Richard’s Pipit (Större piplärka) flew over Bredmar
- 25th – 1 Kittiwake (Tretåig mås) flew south down east coast
- 26th – 2 Kittiwake (Tretåig mås) and 3 Smew / Salskrake migrated southwest past Södra Udden
- 26th – 1 Black Redstart (Svart rödstjärt) in Byn
- 29th – 1 Swallow (Ladusvala) flew north over Byn
- 30th – 2 Pallid Swift (Blek tornseglare) mobile around the south of the island
- 31st - 1 Pallas’s Warbler (Kungsfågelsångare) ringed at Bredmar



Red-flanked Bluetail (Tajga blåstjärt) ©Espen Quinto-Ashman



Long-tailed Tit (Stjärtmes) ©Espen Quinto-Ashman

November

Barnacle Geese (Vitkindad gäss) were migrating in significant numbers at the beginning of the month. Whooper Swan (Sångsvan) migration began and on 6th and over 400 were counted migrating southwest on 8th. Significant numbers of ducks were also counted on several dates.

Highlights included:

- 6th – a small flock of Bearded Tits (Skäggmes) in the reedbed at Bredmar, present several days
- 6th – 1 Grey Wagtail (Forsärla) flew over Södra Udden
- 7th – 3 Little Gull (Dvärgmåsar) migrated past Södra Udden
- 7th – 3 Smew (Salskrake) migrated past Södra Udden
- 7th – 1 Parrot Crossbill (Större korsnäbb) flew over Södra Udden
- 8th – 1 Lesser Whitethroat ssp halimodendri (Stäppärtsångare) at Norrudden, present several days
- 8th – 1 Barn Swallow (Ladusvala) flew past Norrudden
- 13th – 3 Kittiwake (Tretåig mås) migrated south past Södra Udden
- 16th – 1 Kittiwake (Tretåig mås) migrated south past Södra Udden



Barnacle Geese (Vitkindad gäss) ©Espen Quinto-Ashman

Yellow-browed warbler (Tajgasångare) project

The Yellow-browed Warbler (Tajgasångare) is a small warbler belonging to the genus *phylloscopus*; they have a breeding range from the west Ural mountains all the way across to the far east of Siberia. The species has experienced a range expansion in the west of its range in recent times. The majority of the population winters in Southeast Asia, but in recent years, the species has become an increasingly regular part of autumn migration in Europe. Through a ringing recapture, one individual has recently been proven to return to the same wintering grounds in Spain in subsequent winters. Clearly this western-wintering minority population is worthy of further study.

This year was our second year of participation in a Europe-wide project aimed at learning more about the occurrence of the species in Europe. On Landsort, we used playback throughout September and October on our pair of non-standard 'juniper' nets in order to increase our chances of catching the species. 2020 has been a record year for Yellow-browed Warbler on Landsort, tying in with generally higher than average numbers recorded throughout Western Europe. Out of the total of 17 ringed, two were caught to playback in the 'juniper' nets, two were in standard nets and the remaining 13 were caught in non-standard nets without playback. Out of the 17, 16 were aged as juveniles on a combination of the following features: structure and shape of primary feathers, structure and shape of rectrices, structure of the undertail coverts, structure and contrast between duller, 'looser' retained juvenile upper-tail coverts and brighter green, higher quality adult feathers and structure, colour and shape of the wing coverts.



Yellow-browed Warbler (Tajgasångare) ©Espen Quinto-Ashman

Bed nights, membership fees and other income

From 1st January until 15th November, there were 313 bed nights accounting for a total income of 46912:-. Membership payments totaling 28450:- were collected between these dates. In addition, room three at the Observatory was rented to Saltboden and then Svedtiljas hotel on Landsort as staff accommodation between 17th June and 9th August.

As in previous years, maps were sold at the noticeboard at the bottom of the lane. This year, due to Coronavirus, only SWISH payments were accepted for these. Map sales accounted for an income of 1190:-.

| Income type | Amount (SEK) |
|--------------------|---------------------|
| Membership | 28450 |
| Overnight stay | 46912 |
| Map sales | 1190 |
| Donations | 29900 |

Guided talks

Since the beginning of our current project period, we have provided guided talks throughout each season aimed at expanding the reach of our work to a wider audience and benefitting the island community as a whole. Our talks also have the potential to heighten visitors' awareness of the avian richness of the archipelago and the extraordinary feats that birds accomplish every year on migration.

Guided talks were again offered throughout the season this year, with provisions both for pre-booking and open sessions. The talks are structured to contain an introduction to the station, the standardised scheme that we follow and why it is so important for the long-term monitoring of bird populations and migration studies. We give some examples of how ringing has uncovered changes in bird populations in response to climate change and other human activities, and that these studies can influence government policy accordingly. We explain the licensing conditions and the paramount importance of the welfare of every bird we process. We demonstrate the data collection process and talk about the seasonal variation in numbers and the different species that occur. Including a question and answer session, most of the talks lasted from half an hour to one hour, depending on the interest level of the group.

This year, the COVID-19 pandemic affected the number of guidings we were able to give, for example many organisations stopped organising physical excursions, and this is where many of our pre-booked guidings have resulted from in the past. Open guidings were also affected, Waxholmsbolaget advising against all but essential travel, and also limited the number of passengers on each trip to 20. We also altered the way we do the guidings to reduce the chances of spreading the virus – this involved not bringing visitors inside the ringing lab as we have in the past, as well as observing social distancing.

13 guided talks were given this year to a total of 85 adults and 16 under 18s, the first on 2nd May and the last on 10th October. These generated an income of 9600:-. In addition to the usual booked and open talks we also provided two as part of a package for groups staying at the station:

- Seven members as part of the birding weekend in October
- Six members of Fältbiologerna as part of their visit to the Fågelstation in October

One of the talks was to a school group, with a total of 16 students.

34 open guiding sessions were available every Wednesday and Sunday at 11:00, beginning on 3rd May and terminating on 26th August. Of these, eight were attended, four on Wednesdays and four on Sundays.

Guests were directed to the talks by a variety of means including: promotional posters around the island, our online presence and the hostel and hotel.

Systematic list of butterflies recorded on Landsort during 2020



Camberwell Beauty (Sorgmantel) ©Espen Quinto-Ashman

| Swedish | English | Scientific | Submissions |
|----------------------|------------------------|-----------------------|-------------|
| Silversmygare | Silver-spotted Skipper | <i>Hesperia comma</i> | 2 |

First recorded in Artportalen in August 2006 and annually since 2011. During 2020 observed on 20th & 25th August.

| | | | |
|--------------------|---------------|--------------------------|----|
| Ängssmygare | Large Skipper | <i>Ochlodes sylvanus</i> | 53 |
|--------------------|---------------|--------------------------|----|

First recorded in Artportalen in July 2003 and sporadically encountered in subsequent years. During 2020 observed between 14th June & 8th August.

| | | | |
|----------------------------|---------------|---------------------------|----|
| Mindre tätelsmygare | Essex Skipper | <i>Thymelicus lineola</i> | 11 |
|----------------------------|---------------|---------------------------|----|

First recorded in Artportalen in August 2004 and becoming more frequently encountered in recent years. During 2020 observed between 7th July & 24th July.

| | | | |
|-------------------------|--------------|------------------------|----|
| Mindre guldvinge | Small Copper | <i>Lycaena phlaeas</i> | 63 |
|-------------------------|--------------|------------------------|----|

First recorded in Artportalen in May 2005 and becoming more frequently encountered in recent years. During 2020 observed between 9th May & 19th August.

| | | | |
|--------------------------|----------------------|--------------------------|----|
| Midsommarblåvinge | Northern Brown Argus | <i>Aricia Artaxerxes</i> | 44 |
|--------------------------|----------------------|--------------------------|----|

First recorded in Artportalen in July 2003 and sporadically encountered in subsequent years. During 2020 observed between 8th June & 22th July.

| | | | |
|---------------------|------------|----------------------------|----|
| Tostebåvinge | Holly Blue | <i>Celastrina argiolus</i> | 77 |
|---------------------|------------|----------------------------|----|

First recorded in Artportalen in June 2006 and sporadically encountered in subsequent years. During 2020 observed between 10th April & 11th August.

| | | | |
|---------------------|---------------------|-----------------------|---|
| Ljungbåvinge | Silver-studded Blue | <i>Plebejus argus</i> | 2 |
|---------------------|---------------------|-----------------------|---|

First recorded in Artportalen in July 2003, becoming more frequently encountered in recent years. During 2020 observed on 10th July & 16th July.

| | | | |
|-------------------|-----------|----------------------|----|
| Hedbåvinge | Idas Blue | <i>Plebejus idas</i> | 44 |
|-------------------|-----------|----------------------|----|

First recorded in Artportalen in July 2003 and then infrequently in subsequent years. During 2020 observed between 19th June & 8th August.

| | | | |
|------------------------|-------------|---------------------------|---|
| Puktörnebåvinge | Common Blue | <i>Polyommatus icarus</i> | 8 |
|------------------------|-------------|---------------------------|---|

First recorded in Artportalen in July 2003 and then infrequently in subsequent years. During 2020 observed between 14th June & 9th August.

| | | | |
|-----------------------|------------------|------------------------|----|
| Grönsnabbvinge | Green Hairstreak | <i>Callophrys rubi</i> | 22 |
|-----------------------|------------------|------------------------|----|

First recorded in Artportalen in May 2005. During 2020 observed between 22th April & 14th June.

| | | | |
|----------------------|------------------|-----------------------|---|
| Eldsnabbvinge | Brown Hairstreak | <i>Thecla betulae</i> | 3 |
|----------------------|------------------|-----------------------|---|

First recorded in Artportalen in August 2008 and infrequently encountered in subsequent years. During 2020 observed on three occasions between 11th August and 7th September.

| | | | |
|-------------------------------------|--------------------------|------------------------|---|
| Silverstreckad pärlormfjäril | Silver-washed Fritillary | <i>Argynnis paphia</i> | 7 |
|-------------------------------------|--------------------------|------------------------|---|

First recorded in Artportalen in August 2008 and intermittently encountered in subsequent years. During 2020 observed between 14th July & 18th August.

| | | | |
|----------------------------------|---------------------------|-------------------------|----|
| Storfläckig pärlormfjäril | Queen of Spain Fritillary | <i>Issoria lathonia</i> | 60 |
|----------------------------------|---------------------------|-------------------------|----|

First recorded in Artportalen in October 2003 and intermittently recorded in subsequent years. During 2020 observed between 21st April & 24th September.

| | | | |
|--------------------------|-----------------------|------------------------|---|
| Ängspärlormfjäril | Dark Green Fritillary | <i>Argynnis aglaja</i> | 1 |
|--------------------------|-----------------------|------------------------|---|

First recorded in Artportalen in July 2006 and intermittently encountered in subsequent years. During 2020 observed on 22nd July.

| | | | |
|--------------------|---------|------------------|----|
| Påfågelläga | Peacock | <i>Aglais io</i> | 12 |
|--------------------|---------|------------------|----|

First recorded in Artportalen during May 1989 and frequently encountered since. During 2020 observed between 15th April & 12th August.

| | | | |
|---------------------|---------------------|-----------------------|---|
| Nässelfjäril | Small Tortoiseshell | <i>Aglais urticae</i> | 7 |
|---------------------|---------------------|-----------------------|---|

First recorded in Artportalen in May 1989 and intermittently encountered in subsequent years. During 2020 observed between 16th & 23rd April then 23rd August in the autumn.

| | | | |
|-------------------|-------------------|--------------------------|---|
| Sorgmantel | Camberwell Beauty | <i>Nymphalis antiopa</i> | 7 |
|-------------------|-------------------|--------------------------|---|

First recorded in Artportalen in May 1989 and intermittently encountered in subsequent years. During 2020 observed between 10th & 23rd April during spring and 14th & 16th August in the autumn.

| | | | |
|--------------------|-----------------|--------------------------|---|
| Vinbärsfuks | Comma Butterfly | <i>Polygonia c-album</i> | 3 |
|--------------------|-----------------|--------------------------|---|

First recorded in Artportalen in June 2004 and then not recorded again until 2019. During 2020 observed on 19th & 21st April.

| | | | |
|---------------|-------------|-------------------------|----|
| Amiral | Red Admiral | <i>Vanessa atalanta</i> | 20 |
|---------------|-------------|-------------------------|----|

First recorded in Artportalen in September 2000 and frequently encountered since. During 2020 observed between 9th April & 12th October.

| | | | |
|---------------------|--------------|-----------------------|---|
| Tistelfjäril | Painted Lady | <i>Vanessa cardui</i> | 2 |
|---------------------|--------------|-----------------------|---|

First recorded in Artportalen in September 2000 and frequently encountered since. During 2020 observed on 12th & 15th June.

| | | | |
|----------------------|-------------|------------------------------|----|
| Kamgräsfjäril | Small Heath | <i>Coenonympha pamphilus</i> | 57 |
|----------------------|-------------|------------------------------|----|

First recorded in Artportalen in July 2003 and frequently encountered since. During 2020 observed between 2nd June & 16th August.

| | | | |
|--------------------------|------------|--------------------------|---|
| Svingelgräsfjäril | Wall Brown | <i>Lasiommata megera</i> | 8 |
|--------------------------|------------|--------------------------|---|

First recorded in Artportalen in June 2006 and frequently encountered since. During 2020 observed between 26th May & 26th August.

| | | | |
|-----------------------|---------|------------------------------|----|
| Luktgräsfjäril | Ringlet | <i>Aphantopus hyperantus</i> | 37 |
|-----------------------|---------|------------------------------|----|

First recorded in Artportalen in July 2003 and frequently encountered since. During 2020 observed between 6th July & 12th August.

| | | | |
|-----------------------|----------|--------------------------|----|
| Sandgräsfjäril | Grayling | <i>Hipparchia semele</i> | 49 |
|-----------------------|----------|--------------------------|----|

First recorded in Artportalen in August 2004 and frequently encountered since. During 2020 observed between 7th July & 7th September.

| | | | |
|---------------------|---------------------|--------------------------|----|
| Citronfjäril | Brimstone Butterfly | <i>Gonepteryx rhamni</i> | 54 |
|---------------------|---------------------|--------------------------|----|

First recorded in Artportalen in May 1989 and frequently encountered since. During 2020 observed between 6th April & 28th September.

| | | | |
|------------------|-------------|-------------------------|----|
| Kålfjäril | Large White | <i>Pieris brassicae</i> | 19 |
|------------------|-------------|-------------------------|----|

First recorded in Artportalen in July 2003 and frequently encountered since. During 2020 observed between 9th April & 11th August.

| | | | |
|-------------------|--------------------|--------------------|----|
| Rapsfjäril | Green-veined White | <i>Pieris napi</i> | 17 |
|-------------------|--------------------|--------------------|----|

First recorded in Artportalen in July 2003 and frequently encountered since. During 2020 observed between 7th May & 9th June.

| | | | |
|------------------|-------------|---------------------|----|
| Rovfjäril | Small White | <i>Pieris rapae</i> | 12 |
|------------------|-------------|---------------------|----|

First recorded in Artportalen in June 2003 and frequently encountered since. During 2020 observed between 24th May & 2nd September.

| | | | |
|---------------------|------------|-------------------------------|---|
| Aurorafjäril | Orange-tip | <i>Anthocharis cardamines</i> | 4 |
|---------------------|------------|-------------------------------|---|

First recorded in Artportalen in June 2006 and then not recorded until 2019. During 2020 observed between 11th May & 1st June.

Systematic list of odonata recorded on Landsort during 2020

| Swedish | English | Scientific | Submissions |
|---------|---------|------------|-------------|
|---------|---------|------------|-------------|

| | | | |
|----------------------------------|-------------------|----------------------|---|
| Pudrad smaragdflickslända | Emerald Damselfly | <i>Lestes sponsa</i> | 1 |
|----------------------------------|-------------------|----------------------|---|

First recorded in Artportalen in July 2019. During 2020 observed once.

| | | | |
|----------------------------|--------------------|------------------------------|----|
| Mörk lyrflickslända | Variable Damselfly | <i>Coenagrion pulchellum</i> | 18 |
|----------------------------|--------------------|------------------------------|----|

First recorded in Artportalen in July 2017. During 2020 observed between 1st June & 22nd July.

| | | | |
|----------------------------------|--------------------|-------------------------|----|
| Större rödögonflickslända | Red-eyed Damselfly | <i>Erythromma najas</i> | 23 |
|----------------------------------|--------------------|-------------------------|----|

First recorded in Artportalen in July 2017. During 2020 observed between 2nd June & 22nd July.

| | | | |
|-------------------------------|-----------------------|-------------------------|----|
| Större kustflickslända | Blue-tailed Damselfly | <i>Ischnura elegans</i> | 15 |
|-------------------------------|-----------------------|-------------------------|----|

First recorded in Artportalen in July 2007. During 2020 observed between 1st June & 18th August.

| | | | |
|-----------------------------|-----------------|----------------------|----|
| Blågrön mosaikslända | Southern Hawker | <i>Aeshna cyanea</i> | 26 |
|-----------------------------|-----------------|----------------------|----|

First recorded in Artportalen in October 2007. During 2020 observed between 22nd July & 2nd October.

| | | | |
|--------------------------|--------------|-----------------------|----|
| Brun mosaikslända | Brown Hawker | <i>Aeshna grandis</i> | 11 |
|--------------------------|--------------|-----------------------|----|

First recorded in Artportalen in July 2011. During 2020 observed between 16th July & 2nd September.

| | | | |
|--------------------------|---------------|----------------------|----|
| Starrmosaikslända | Common Hawker | <i>Aeshna juncea</i> | 29 |
|--------------------------|---------------|----------------------|----|

First recorded in Artportalen in August 2010, single observations in 2011, 2015 & 2016 during July and August and recorded frequently during 2019. During 2020 observed between 7th July & 2nd October.

| | | | |
|-------------------------|----------------|---------------------|----|
| Höstmosaikslända | Migrant Hawker | <i>Aeshna mixta</i> | 11 |
|-------------------------|----------------|---------------------|----|

First recorded in Artportalen in September 2016. During 2020 observed between 5th August & 16th October.

| | | | |
|------------------------------|-------------------|-----------------------|---|
| Blå kejsartrollslända | Emporer Dragonfly | <i>Anax imperator</i> | 8 |
|------------------------------|-------------------|-----------------------|---|

First recorded in Artportalen in 2019, observed between 30th June & 24th August. During 2020 observed between 31st July & 30th August.

| | | | |
|--|----------------------|---------------------------------|----|
| Tidig mosaikslända | Hairy Dragonfly | <i>Brachytron pratense</i> | 6 |
| First recorded in Artportalen in 2019 observed between 10th & 30th June. During 2020 observed between 27th May & 24th June. | | | |
| Guldrollslända | Downy Emerald | <i>Cordulia aenea</i> | 8 |
| First recorded in Artportalen in May 2014. During 2020 observed between 3rd June & 31st July. | | | |
| Fyrfläckad trollslända | Four-spotted Chaser | <i>Libellula quadrimaculata</i> | 46 |
| First recorded in Artportalen in June 2011 and intermittently recorded in subsequent years, encountered more frequently during 2019. During 2020 observed between 23rd May & 18th August. | | | |
| Större sjörollslända | Black-tailed Skimmer | <i>Orthetrum cancellatum</i> | 54 |
| First recorded in Artportalen in July 2017. During 2020 observed between 2nd June & 23rd July. | | | |
| Svart ängstrollslända | Black Darter | <i>Sympetrum danae</i> | 5 |
| First recorded in Artportalen in August 2015, also single dates in 2016 and 2017, then frequently in 2019. During 2020 observed between 7th & 28th September. | | | |
| Gulfläckad ängstrollslända | Yellow-winged Darter | <i>Sympetrum flaveolum</i> | 2 |
| First recorded in Artportalen in July 2011, then infrequently encountered in subsequent years. During 2020 observed on two dates, 2nd & 9th August. | | | |
| Blodröd ängstrollslända | Ruddy Darter | <i>Sympetrum sanguineum</i> | 5 |
| First recorded in Artportalen in August 2016 and then once in September for 2017, then more frequently in 2019. During 2020 observed between 16th August & 28th September. | | | |
| Större ängstrollslända | Common Darter | <i>Sympetrum striolatum</i> | 51 |
| First recorded in Artportalen in August 2015 then again in 2019. During 2020 observed between 22nd July & 17th October. | | | |
| Tegelröd ängstrollslända | Moustached Darter | <i>Sympetrum vulgatum</i> | 1 |
| First recorded in Artportalen in July 2007 and infrequently recorded in subsequent years. During 2020 observed once at Kapellet. This species is probably under recorded due to the close resemblance of <i>Sympetrum striolatum</i> . | | | |

Systematic list of moths recorded on Landsort during 2020

A Robinson moth trap fitted with 125W MV bulb was situated on the southern end of the Fågelstation for the duration of the 2020 monitoring period: March 17th until November 10th. All species identified and the number of individuals seen have been recorded on Artportalen.

The species list in the table is of all moths identified on Landsort during 2020, not exclusively the species attracted to the light trap.



Poplar Hawk-moth (Poppelsvärmare) ©Espen Quinto-Ashman



Eyed Hawk-moth (Videsvärmare) ©Espen Quinto-Ashman

| Species | | |
|------------------------------|-------------------------|------------------------------|
| Nemophora degeerella | Parascotia fuliginaria | Autographa gamma |
| Incurvaria mascullella | Herminia tarsipennalis | Plusia festucae |
| Alucita hexadactyla | Macrochilo cribrumalis | Syngrapha interrogationis |
| Pterotopteryx dodecadactyla | Paracolax tristalis | Nola aerugula |
| Deilephila elpenor | Pechipogo strigilata | Pseudoips prasinanus |
| Deilephila porcellus | Hypena crassalis | Earias clorana |
| Hyles gallii | Lygephila cracca | Cerura vinula |
| Macroglossum stellatarum | Lygephila pastinum | Stauropus fagi |
| Laothoe populi | Acronicta aceris | Notodonta dromedarius |
| Smerinthus ocellata | Acronicta cinerea | Notodonta ziczac |
| Sphinx ligustri | Acronicta psi | Pheosia gnoma |
| Sphinx pinastri | Craniophora ligustri | Pheosia tremula |
| Cossus cossus | Allophyes oxyacanthae | Phalera bucephala |
| Drepana curvatula | Amphipyra pyramidea | Pterostoma palpinum |
| Drepana falcataria | Bryophila raptricula | Ptilodon capucina |
| Falcaria lacertinaria | Cryphia algae | Clostera curtula |
| Watsonalla binaria | Cucullia absinthii | Clostera pigra |
| Oegoconia deauratella | Diloba caeruleocephala | Cnaemidophorus rhododactylus |
| Diurnea fagella | Deltote pygarga | Gillmeria pallidactyla |
| Coleophora alcyonipennella | Pyrrhia umbra | Gillmeria tetradactyla |
| Coleophora frischella | Actinotia polyodon | Hellinsia didactylites |
| Agonopterix arenella | Chloantha hyperici | Oxyptilus pilosellae |
| Agonopterix ciliella | Amphipoea fucosa | Platyptilia gonodactyla |
| Agonopterix heracliana | Amphipoea lucens | Elophila nymphaeata |
| Elachista maculicerusella | Amphipoea oculea | Nymphula nitidulata |
| Ethmia bipunctella | Apamea furva | Agriphila inquinatella |
| Nothris lemniscella | Apamea illyria | Agriphila selasella |
| Aristotelia ericinella | Apamea lateritia | Agriphila tristella |
| Bryotropha affinis | Apamea lithoxylaea | Calamotropha paludella |
| Bryotropha terrella | Apamea monoglypha | Catoptria falsella |
| Eulamprotes wilkella | Apamea remissa | Catoptria margaritella |
| Isophrictis striatella | Apamea sublustris | Catoptria pinella |
| Exoteleia dodecella | Apamea unanimitis | Catoptria verella |
| Neofriseria peliella | Arenostola phragmitidis | Chilo phragmitella |
| Pseudotelphusa paripunctella | Globia algae | Chrysoteuchia culmella |
| Teleiopsis diffinis | Gortyna flavago | Crambus lathoniellus |
| Crassa unitella | Hydraecia micacea | Crambus perlellus |
| Harpella forficella | Hydraecia nordstroemi | Crambus silvellus |
| Metalampra cinnamomea | Litologia literosa | Euchromius ocella |
| Pleurota bicostella | Luperina testacea | Evergestis extimalis |
| Carcina quercana | Mesapamea secalis | Evergestis limbata |
| Abraxas grossulariata | Mesologia furuncula | Evergestis pallidata |
| Lomographa temerata | Nonagria typhae | Cynaeda dentalis |
| Biston betularia | Oligia strigilis | Anania coronata |
| Biston strataria | Photodes fluxa | Anania hortulata |

| | | |
|---------------------------------|--------------------------------|---------------------------------|
| <i>Lycia hirtaria</i> | <i>Rhizedra lutosa</i> | <i>Loxostege sticticalis</i> |
| <i>Deileptenia ribeata</i> | <i>Caradrina clavipalpis</i> | <i>Ostrinia nubilalis</i> |
| <i>Ematurga atomaria</i> | <i>Caradrina morpheus</i> | <i>Pyrausta despicata</i> |
| <i>Hypomecis punctinalis</i> | <i>Caradrina selini</i> | <i>Donacaula forficella</i> |
| <i>Hypomecis roboraria</i> | <i>Charanyca trigrammica</i> | <i>Donacaula mucronella</i> |
| <i>Peribatodes secundaria</i> | <i>Charanyca ferruginea</i> | <i>Eudonia lacustrata</i> |
| <i>Cabera exanthemata</i> | <i>Hoplodrina ambigua</i> | <i>Eudonia mercurella</i> |
| <i>Cabera pusaria</i> | <i>Hoplodrina blanda</i> | <i>Eudonia sudetica</i> |
| <i>Lomaspilis marginata</i> | <i>Hoplodrina octogenaria</i> | <i>Eudonia truncicolella</i> |
| <i>Crocallis elinguaris</i> | <i>Dypterygia scabriuscula</i> | <i>Scoparia ambigualis</i> |
| <i>Ennomos alniaria</i> | <i>Thalpophila matura</i> | <i>Scoparia pyralella</i> |
| <i>Ennomos fuscantaria</i> | <i>Anarta myrtilli</i> | <i>Dolicharthria punctalis</i> |
| <i>Selenia lunularia</i> | <i>Anarta trifolii</i> | <i>Mecyna flavalis</i> |
| <i>Selenia tetralunaria</i> | <i>Ceramica pisi</i> | <i>Patania ruralis</i> |
| <i>Epione repandaria</i> | <i>Hada plebeja</i> | <i>Udea prunalis</i> |
| <i>Opisthograptis luteolata</i> | <i>Hadena albimacula</i> | <i>Acrobasis advenella</i> |
| <i>Charissa obscurata</i> | <i>Hadena bicurris</i> | <i>Dioryctria abietella</i> |
| <i>Gnophos obfuscata</i> | <i>Hadena capsincola</i> | <i>Euzophera pinguis</i> |
| <i>Petrophora chlorosata</i> | <i>Hadena perplexa</i> | <i>Homoeosoma sinuellum</i> |
| <i>Chiasmia clathrata</i> | <i>Lacanobia contigua</i> | <i>Laodamia faecella</i> |
| <i>Macaria alternata</i> | <i>Lacanobia oleracea</i> | <i>Nyctegretis lineana</i> |
| <i>Macaria liturata</i> | <i>Lacanobia suasa</i> | <i>Oncocera semirubella</i> |
| <i>Odontopera bidentata</i> | <i>Lacanobia thalassina</i> | <i>Pempelia palumbella</i> |
| <i>Ourapteryx sambucaria</i> | <i>Lacanobia w-latinum</i> | <i>Rhodophaea formosa</i> |
| <i>Geometra papilionaria</i> | <i>Mamestra brassicae</i> | <i>Selagia spadicella</i> |
| <i>Hemithea aestivaria</i> | <i>Melanchra persicariae</i> | <i>Hypsopygia costalis</i> |
| <i>Aplocera efformata</i> | <i>Pachetra sagittigera</i> | <i>Hypsopygia glaucinalis</i> |
| <i>Aplocera plagiata</i> | <i>Polia bombycina</i> | <i>Pyralis regalis</i> |
| <i>Chloroclysta siterata</i> | <i>Sideridis reticulata</i> | <i>Synaphe punctalis</i> |
| <i>Cidaria fulvata</i> | <i>Leucania comma</i> | <i>Psyche casta</i> |
| <i>Cosmorhoe ocellata</i> | <i>Leucania obsoleta</i> | <i>Taleporia tubulosa</i> |
| <i>Eulithis prunata</i> | <i>Mythimna albipuncta</i> | <i>Infurcitinea ignicomella</i> |
| <i>Eulithis testata</i> | <i>Mythimna conigera</i> | <i>Nemapogon wolffiellus</i> |
| <i>Pennithera firmata</i> | <i>Mythimna ferrago</i> | <i>Monopis monachella</i> |
| <i>Plemyria rubiginata</i> | <i>Mythimna impura</i> | <i>Ancylis apicella</i> |
| <i>Thera cognata</i> | <i>Mythimna pallens</i> | <i>Ancylis badiana</i> |
| <i>Thera juniperata</i> | <i>Agrotis clavis</i> | <i>Ancylis geminana</i> |
| <i>Thera obeliscata</i> | <i>Agrotis exclamationis</i> | <i>Ancylis laetana</i> |
| <i>Eupithecia assimilata</i> | <i>Agrotis segetum</i> | <i>Ancylis tineana</i> |
| <i>Eupithecia centaureata</i> | <i>Agrotis vestigialis</i> | <i>Celypha cespitana</i> |
| <i>Eupithecia icterata</i> | <i>Euxoa obelisca</i> | <i>Celypha lacunana</i> |
| <i>Eupithecia linariata</i> | <i>Cerastis rubricosa</i> | <i>Celypha rivulana</i> |
| <i>Eupithecia nanata</i> | <i>Epilecta linogrisea</i> | <i>Celypha rurestrana</i> |
| <i>Eupithecia satyrata</i> | <i>Epipsilia grisescens</i> | <i>Dichrorampha acuminatana</i> |
| <i>Eupithecia subfuscata</i> | <i>Eugnorisma depuncta</i> | <i>Enarmonia formosana</i> |
| <i>Gymnoscelis rufifasciata</i> | <i>Eurois occulta</i> | <i>Epiblema foenella</i> |

| | | |
|-----------------------------|---------------------------|-------------------------------|
| Epirrita dilutata | Lycophotia porphyrea | Epinotia ramella |
| Perizoma alchemillata | Noctua comes | Epinotia solandriana |
| Triphosa dubitata | Noctua fimbriata | Eucosma cana |
| Trichopteryx carpinata | Noctua janthe | Eucosma conterminana |
| Camptogramma bilineata | Noctua orbona | Eucosma metzneriana |
| Catarhoe cuculata | Noctua pronuba | Eucosma obumbratana |
| Epirrhone alternata | Ochropleura plecta | Hedya nubiferana |
| Epirrhone galiata | Spaelotis ravida | Lathronympha strigana |
| Scotopteryx chenopodiata | Xestia baja | Lobesia bicinctana |
| Xanthorhoe designata | Xestia c-nigrum | Notocelia cynosbatella |
| Xanthorhoe ferrugata | Xestia sexstrigata | Notocelia incarnatana |
| Xanthorhoe fluctuata | Xestia triangulum | Notocelia uddmanniana |
| Scopula immutata | Xestia xanthographa | Rhyacionia pinicolana |
| Scopula rubiginata | Orthosia cerasi | Thiodia citrana |
| Idaea aversata | Orthosia cruda | Acleris bergmanniana |
| Idaea biselata | Orthosia gothica | Acleris comariana |
| Idaea deversaria | Orthosia incerta | Acleris hyemana |
| Idaea dimidiata | Orthosia opima | Acleris laterana |
| Idaea emarginata | Euplexia lucipara | Acleris variegana |
| Idaea fuscovenosa | Phlogophora meticulosa | Aethes margaritana |
| Idaea humiliata | Spodoptera exigua | Aethes rutilana |
| Idaea straminata | Cerapteryx graminis | Aethes smeathmanniana |
| Idaea sylvestraria | Tholera cespitis | Agapeta hamana |
| Timandra comae | Tholera decimalis | Agapeta zoegana |
| Aspilapteryx tringipennella | Ammoconia caecimacula | Archips oporanus |
| Calybitis phasianipennella | Antitype chi | Archips podanus |
| Gracillaria syringella | Aporophyla lueneburgensis | Cochylidia implicitana |
| Parornix scoticella | Dasypolia templi | Cochylis dubitana |
| Korscheltellus lupulinus | Dryobotodes eremita | Dichelia histrionana |
| Triodia sylvina | Mniotype adusta | Epagoge grotiana |
| Lasiocampa trifolii | Mniotype satura | Eupoecilia angustana |
| Macrothylacia rubi | Agrochola circellaris | Pandemis corylana |
| Malacosoma neustrium | Agrochola helvola | Pandemis heparana |
| Poecilocampa populi | Agrochola litura | Paramesia gnomana |
| Micropterix aureatella | Agrochola macilenta | Zelotherses paleana |
| Opostega salaciella | Cirrhia icteritia | Argyresthia abdominalis |
| Arctia caja | Conistra rubiginosa | Argyresthia conjugella |
| Diacrisia sannio | Conistra rubiginosa | Argyresthia goedartella |
| Diaphora mendica | Conistra vaccinii | Argyresthia pruniella |
| Phragmatobia fuliginosa | Lithophane furcifera | Plutella xylostella |
| Spilosoma lubricipedum | Lithophane socia | Paraswammerdamia conspersella |
| Coscinia cribraria | Xanthia togata | Yponomeuta evonymellus |
| Miltochrista miniata | Calophasia lunula | Yponomeuta sedellus |
| Eilema complanum | Colocasia coryli | Ypsolopha nemorella |
| Eilema lurideolum | Abrostola asclepiadis | Adscita statices |
| Eilema lutarellum | Abrostola triplasia | |
| Lithosia quadra | Macdunnoughia confusa | |

