

The Woolston Eyes Conservation Group



Annual Report
2022

Colin Woolf Fine Art

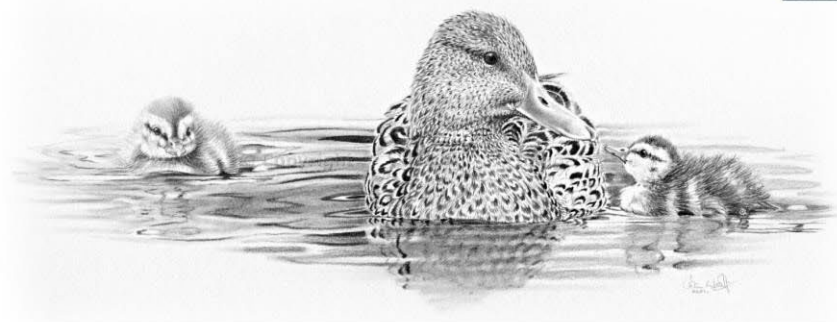


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WOOLSTON EYES CONSERVATION GROUP

ANNUAL REPORT 2022

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CHAIRMAN'S REPORT

This year saw the culmination of our decade-long efforts to fund and develop a major new wetland on No.4 bed. Work was completed and the new, elevated viewing platform opened to permit holders towards year end. The high numbers and variety of birds already using the wetland, even at this early stage in its development, have made all the hard work worthwhile. Once again, I have to thank all those who have supported us in completing this complex and large-scale project. They are too numerous to name individually, but our colleagues from Peel Ports, the RSPB and Natural England have been unstintingly generous in providing a wide range of technical inputs, which have been fundamental to the success of the project. Our contractor, Steve Fletcher, needs a special mention, as he has gone well beyond the call of duty in creating such an amazingly rich and varied wildlife habitat. In addition, I would like to thank the many local people and permit holders for their patience and for their expressed support about the changes taking place on No.4 bed. I hope they will take full advantage, via our permit system, of having such a nationally important nature reserve on their doorstep.

With the large-scale increase in wetland habitat comes the onerous responsibility of keeping it all in first-class condition. Wetlands quickly go through stages of succession, with reed spreading in the shallower areas, soon to be followed by the spread of Willows, which all contributes to the process of drying out. A massive vote of thanks must go to our Assistant Warden, Lizzie Hill and our Estate Worker, John Ball, for the sustained hard work they have put in, on habitat management, over the past year. We contract for Lizzie and John's services from the RSPB, which is just one more positive aspect of our partnership. Working with our dedicated group of volunteers, they have cut back encroaching reeds, coppiced large areas of woodland, cleared breeding islands of encroaching vegetation, cut and sprayed out invasive plants, built new nest rafts and much more besides. If you want to get involved in practical, voluntary conservation work with us, send an email to our website at info@woolstoneyes.com and we will be in touch.

We are also grateful to all our permit holders, whose positive support is greatly valued and whose permit fees enable us to continue to improve our visitor facilities and fund much of our habitat management work. Equally, our committee members are also volunteers and give their time unstintingly, to make sure that all the background tasks which are necessary to keep the Reserve functioning are performed efficiently, so my thanks to them.

Finally, I am grateful to our editor David Bowman and his team for producing yet another excellent Annual Report and to renowned wildlife artist Colin Woolf for the splendid cover art. The original is available to buy, along with many other outstanding artworks, via Colin's website and you can find the link to this inside the front cover.

I hope to see you on the Reserve in the coming year!

Brian Ankers





ORNITHOLOGICAL SUMMARY

With the new wetland on No.4 bed reaching completion during the year, we were hopeful that 2022 would see a real step up in both species' variety and volume and we were not disappointed. Although the 151 species recorded was an excellent total for recent years, it was more the combination of Reserve (and national!) rarities and an excellent breeding season for some of our key species which made the year so special.

After more than forty-five years of intensive ornithological study, it gets ever harder to add new species to the Reserve list, though we always remain optimistic. So, it was a real red-letter day when, on 31st May, Mike Lloyd discovered a White-tailed Lapwing on the No.4 bed wetland. It was subsequently viewed by a number of observers, remained until nightfall but had moved on by the following morning. A first for Woolston and Cheshire, this rare vagrant to Western Europe had previously been widely reported from a variety of sites in England. Almost as surprising was the arrival of a first-winter Penduline Tit, which turned up in one of the ringing team's nets on No.3 bed on 12 November. This was our first record, and the only other Cheshire sighting is of one on 14 September 1986 on the Wirral at Meols. It was subsequently relocated on the new wetland on No.4 bed on 22 November, was seen again in the same location the next day, allowing a good number of observers to get fleeting views and was then not seen again. These two excellent records bring the Reserve list to 246.

While not additions to the Reserve list, it was good to see two species recorded which have not been seen for far too long. The No.4 bed wetland confirmed its attractiveness to passing waders when a Temminck's Stint, accompanied by a Dunlin, landed right in front of Dan Owen and I on 28 April. This was the first record of this rare visitor since 1989. Shortly afterwards, on 30 April, Dan picked out a female Ferruginous Duck from among a flock of Tufted Ducks on No.3 bed. This rare and declining visitor was seen by many observers, is the eighth record for Woolston and the first since 1995. Other scarcities for the Reserve included: Glossy Ibis, with five sightings after being added to the list in 2021, Rock Pipit, our first since 1991, Water Pipit, not seen since 2000, Little Stint, last noted in 1998 and just our third Spoonbill, last recorded in 2010.

For our key breeding species, fortunes were mixed. The slow but steady decline in our Willow Tit breeding population continues and is a major concern and remains the focus of much of our habitat management activity. Black-necked Grebes, however, benefiting from the increase in wetland habitat, experienced what is certainly the most remarkable breeding season at any site in the United Kingdom since this rare grebe first bred, in Wales, in 1904. The total of 38 adults producing at least 32 young is unprecedented in the UK and with a number of adults showing an active interest in the new wetland on No.4 bed, there is the potential for a significant further increase in numbers. Pochard also did reasonably well, with 16 broods recorded, which is creditable given the UK population of just 700 pairs, while there was some evidence that Garganey, a recent addition to our breeding list, may again have bred successfully. Pleasingly, Marsh Harriers again bred successfully for the third successive year. So, on balance, an excellent year and as the No.4 bed wetland continues to mature, we can hopefully look forward to an equally exciting 2023. Hopes for the coming year would include seeing our Willow Tit population start to stabilise and for Black-necked Grebes to be successfully established on No.4 bed.

David Bowman





Weather 2022

In contrast to the trend of recent years for ever-increasing annual rainfall 2022 was drier, with 932mm, largely the result of the below average totals from March to August. In fact, during that time water levels on the Reserve fell sharply and nationally a drought was declared. The early months of the year were also cool and windy, with five named storms. Record temperatures were recorded in July, fortunately for only a few days. A dramatic change in September brought high rainfall totals in the last four months, which raised the water levels across the Eyes, especially on the new No.4 wetland.

January began unusually mild with 15°C recorded on 1st. By 3rd it became cold with frosts, then frequent heavy showers and strong north-westerly winds. The weather got progressively worse with 30mm of rain from 6-8th, accompanied by sleet and frequent heavy showers on strong north-westerly winds. By mid-month high pressure had become established, and with it more frosts, temperatures below freezing and ice covering the main pools. 24th was the coldest day of the winter. The anticyclone eventually drifted south, allowing low pressure systems to move in with milder air but strong winds. On 28th the first named storm, Malik, was followed soon after by an even more severe storm, Carrie, which battered the country with gusts of up to 80mph and brought the first significant rain for several weeks.

February, with 142.5mm, was the wettest month of the year. It was also one of the wildest for a very long time. The first few days were mild with showers, but this soon changed, with 30mm between 4th and 6th, accompanied by strong winds and low temperatures. 11th and 12th were the only quiet and dry days before three further named storms, Dudley, Eunice and Franklin brought violent gales and much heavy rain, (56mm), between 17th and 20th.

March, in contrast, was the driest month of the year with just 28mm and was followed by five further months of well below average rainfall and falling water levels cross the Eyes. Apart from a very wet 3rd, the remainder of the month was dominated by high pressure, and many days were windy with overnight frosts. From 18th, however, there was a significant change with temperatures suddenly rising to 16°C on 25th. The first summer migrants arrived, and many butterflies were seen. Nights, however, remained cold. The long-staying anticyclone finally drifted to the east on 28th and a cold front introduced much lower temperatures on a bitter north-east wind.

April. In the last 10 years this month has often been dry, and this was the case in 2022, with just 35mm of rain recorded. It began cold with overnight frosts that made it feel more like January. On the 11th the wind finally moved to the south and temperatures rose to 17°C on 15th and to 19°C the following day. With high pressure once again established the pleasant spring-like conditions continued to 22nd. The final week saw a return to cool weather, courtesy of an easterly wind, while the last day of the month recorded the first rain for several weeks.

May, too, was a month with below average rainfall (55mm), and the drier conditions led to water levels still falling, even on the Ship Canal. The first week was dry apart from some rain on the 6th. There were also some warm days, peaking at 21°C on 14th. Two days later humid conditions resulted in thunderstorms which were widespread across the north-west but missed the Reserve. The second half of May was largely dry, with many cool and windy days.

June. The first two days were warm and dry but were followed by unsettled weather and well below average temperatures. The 5th was bitterly cold with the thermometer struggling to reach 10°C. The persistent north-westerly wind finally abated on the 14th and it became warm, with a peak temperature of 27°C on 22nd and 23rd. It seemed that summer had finally arrived, but this was not the case however, for the final six days were once again unsettled and windy. The rainfall total of 52mm was near average.

July. The limited rainfall continued and apart from a heavy shower on 1st no rain fell until 22nd. Those three weeks were cool with a fresh north-west wind which was ever-present; everywhere was bone-dry and water levels on the Eyes had fallen sharply. Suddenly, however, in mid-month the weather improved dramatically; high pressure became established and with it a heat wave that broke many records across the country. At Woolston 24°C on 16th was soon exceeded, with 36°C two days later and 38°C on 19th, a record high for Warrington and just short of the all-time UK record (which was also beaten on this day). The extreme heat soon eased as a cold front introduced much cooler air the next day, and the temperature fell by 10°C. The final 10 days were unsettled with periods of rain which broke the drought, and of the July total of 48mm all but 4mm was recorded from 22-31st.

August. Despite the welcome rain August was yet another dry month and a national drought was declared. Ironically, 1st with 27mm was the wettest day for many months, and this was almost half the August total of 58mm. Soon after this high pressure built again and temperatures rose to 27°C on 9th, and a peak of 32°C on 12th. These did not last, however, and it was cooler - but still warm - and dry. The Meteorological Office reported that it had been the hottest and driest summer since the record breaking one of 1976.

September was the beginning of a dramatic change, with Atlantic depressions dominating the weather for the remainder of the year. The month began, however, warm and dry with worryingly low water levels on the Reserve. Thereafter it became unsettled with thundery downpours that at last saw water levels begin to rise. A total of 23mm fell on 12 and 13th, and temperatures began to fall. Torrential rain on 22nd caused much local flooding. The final week was cold and wet, leading to a total for the month of 105mm.

October was another wet month with 115mm recorded. It was also warm with the temperature on a number of days reaching 16°C. The rainfall, however, was the main feature, with 49mm falling between 5th and 10th. A few dry days followed, but the final week was very mild and wet.

November was the second wettest month, only just behind the February total. It was for the most part mild and was reported nationally to have been the third warmest November since records began. 10th and 11th were especially warm, thanks to southerly air from the Azores. A succession of depressions on an active Jet Stream produced 98mm of rain between 16th and 27th. A huge anticyclone across Europe and into Russia then blocked the low-pressure systems and temperatures fell in the final three days, struggling to reach 5°C.

December, with 100mm, was very much a month of two halves. The cold weather that ended November persisted until the middle of the month, with many frosty nights. The cold was most severe between 9th and 10th when the temperature fell as low as -9°C, which was the lowest of the year. As a result, all the waters on the Reserve froze over. With high pressure in charge the weather was dry and raw with persistent northerly winds and some occasional snow and sleet. All this changed on 19th when the wind finally came from a southerly direction allowing low pressure systems to bring wetter and milder air into the country. In the final week a total of 70mm was recorded, and by then the wetlands on the Reserve were well and truly replenished, including the two cells on No.4 bed.

Brian Martin

BIRDS: SYSTEMATIC LIST

Grey Partridge

Perdix perdix

Red listed

This once common farmland species continues to decline and there was just one sighting this year, as there was in 2021. One was seen near the east pool on No.1 bed on 27 July.

Pheasant

Phasianus colchicus

Although more records of this resident species were received, numbers were down on the previous year as its decline at Woolston appears to continue. As it is certainly under-recorded it is difficult to properly assess its status. Small numbers were seen on all beds but there were few records in the second half of the year when birds were definitely present. The only count in double figures was on 10 April when a common bird survey found 12 on the northern section of No.4 bed. In fact, many of the 26 records submitted were as a result of Common Bird Surveys. It seems likely that the overall population is between 25 and 30 although as always more information would be welcome. Breeding was confirmed when a group of three juveniles was found on Butchersfield Tip on 29 July. Thereafter only two records were submitted, one in October and one in November.

Canada Goose

Branta canadensis

Numbers present at the Eyes were about average, but the total of pairs that bred was a record for the Reserve.

During January a maximum of 94 was counted on 27th, with peaks of 106 on 23 February and 105 on 15 March. Throughout the year most were seen on Nos.3 and 4 beds, and these were the main waters where breeding took place.

A bird was on a nest in the remote north-east corner of No.3 bed on 9 April and the first brood (seven small young) was on the same bed on 25th. Many more broods appeared on an almost daily basis; the last one of eight small young on No.3 bed on 17 May. A total of 20 broods was recorded, eight on No.3 bed, six on the west cell of No.4 bed, two on the Oxbow surrounding No.3, two on the Mersey below the Loop of No.4 bed and singles on the Loop and the Ship Canal. A large crèche of 21 young was on the west cell of No.4 bed on 19 May and 10 adults with 20 young on the same water on 23 June. The last record from the breeding season was of an adult with five one-third grown goslings on 25 June.

Traditionally the largest numbers are reported in the second half of the year, and this was the case in 2022. In early July 120 were present and the year's maximum of 136 was recorded on 6 October WeBS. Few records were submitted after this; the most significant being 81 on 12 November.

Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
94	106	105	60	16	100	120	17	110	136	81	17

Greylag Goose

Amber listed

Anser anser

Many fewer records were submitted for Greylag Goose than for Canada Goose, but birds were reported in every month except June and July. Many pairs bred.

In the early months most were recorded on the WeBS counts, with 41 on 22 January, 104 on 19 February and smaller numbers in March and April.

The first brood, of five young, was in front of the Morgan Hide on 15 April, and a pair with six very small young was there the following day. Other broods followed almost daily in April and May on beds 3 and 4, the last new one being of nine small young on No.3 on 20 May. Overall, it is believed that 11 pairs bred. In most years few young fledge at Woolston. A crèche of 13 young on No.4 bed on 16 May was not reported again, and there were no records of Greylag Geese on the Reserve in June and July. The only late reference to young was of three juveniles among a flock of 47 on No.4 bed on 4 August.

Some very high numbers were present in the autumn, with 149 on 6 September, 220 on No.4 bed on 28 October and 211 on the whole of the Eyes on the 12 November WeBS count.

Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
41	104	24	27	19	n/c	n/c	87	149	220	211	2

Pink-footed Goose

Amber listed

Anser brachyrhynchus

This was yet another remarkable year for this goose, with record numbers seen in the second winter period.

The first three months produced just 12 reports, all but two in January. A minimum of 500 flew west over No.1 bed on 5 January, and 260 the following day. Three days later 220 again flew west over No.1 bed, while there was just a single report in February. A flock of 150 flying south over No.1 bed on 11 March was the last early-year record.

The first returning birds, 20, flew south over No.3 bed on 16 September, and there were a further two skeins of 200 and 160 on 20th and 28th of the month respectively. October brought further, but unexceptional, movements, until the final week when numbers rose to levels never seen before at Woolston. On 25 October 1200 flew east over No.4 bed, followed by 2000 in the same direction the next day and 3,600 also flying east in many skeins on the early morning of 27. The movement was reported to be over by 9 am. This was just the beginning of the huge numbers reported in the following two weeks. Up to 4,000 flew east at 08.20 on 30 October, but at least 10,000 flew west over Latchford Locks in 20 minutes in the late afternoon of 31 October, presumably going to roost on the Mersey. These massive skeins continued to be reported daily in the first two weeks of November, with birds flying east in the early mornings and west in the evenings. The last breath-taking numbers were 8,000 at dawn on 10 November, 10,000 east on 12 November and a minimum of 10,000 flying west on 13 November. The observer of that count considered that as many as 12,000 birds could have been involved. By then these large noisy skeins had attracted the attention of the general public, while workers from a factory adjacent to Woolston waited to see the geese pass over each evening, and the local Warrington Guardian newspaper published many positive comments of people who had watched this great wildlife spectacle. By the middle of November, however, the daily

movements had ceased and apart from 250 that passed above the migration watchers on 3 December relatively small numbers of Pink-footed Geese were seen.

As in the past five years there were regular reports of Pink-footed Geese feeding on stubble in fields south of No.1 bed: for example, 100 on 24 October, about 1,000 on 24 October, 3,000 on 30 October and 1,000 on 2 November.

Until 2020 Pink-footed Geese had never roosted at Woolston, but they did so again in 2022, with 170 seen leaving No.3 bed on 23 November and several hundred on 29 October. Finally, on 14 November, up to 100 were resting on an island and in the water in the west cell of No.4 bed.

The Pink-footed Geese that winter in this country breed in Iceland and eastern Greenland. Their numbers have increased tenfold from a low point of about 30,000 in the mid-20th century, largely, it is thought, due to improved feeding opportunities on farmland in their wintering areas.

Mute Swan

Cygnus olor

Numbers were similar to recent years in the first half of the year but were much scarcer in the final months. A minimum of four pairs fledged young.

In the first two weeks of January, when freezing conditions froze all the waters except the Ship Canal and River Mersey, relatively few Mute Swans were present on the Eyes, but when the weather turned milder 51 were found on the Reserve on 22 January, 37 on 15 February and 22 on 10 March. One was on a nest at a small pool adjacent to the river on No.1 bed, where young subsequently hatched and fledged.

On 10 March three dead adults were floating on No.3 bed, no doubt victims of avian flu. This incident was reported to DEFRA, but due to difficulties of access to the corpses they were not collected for examination. In late March a bird was incubating eggs at a regular site by Latchford Locks, and four pairs were on the new west cell of No.4 bed, with a fifth pair on the adjacent Loop. Two pairs were also present on No.3 bed.

The first brood of five young appeared on No.3 bed on 23 May, followed by a pair with seven young on the Ship Canal three days later, probably from the nest at Latchford Locks. Another brood of seven small young on the Mersey above Woolston Weir may well have been hatched at the No.1 bed nest. A second brood of three young was successfully hatched on No.3 bed, the two broods were regularly seen there throughout June and July, and most of these young are believed to have fledged. Despite being well watched the five pairs present on No.4 bed and the Loop in late March did not breed. In all four pairs bred successfully, and a fifth pair with one small young seen near the River Bollin on 27 June may well have nested away from the Eyes.

Mute Swan numbers during the final months of the year were lower than in recent years.

Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
51	37	22	23	23	12	7	7	23	16	9	8

Shelduck
Amber listed

Tadorna tadorna

After two disappointing years in 2020 and 2021 there was a return to the higher numbers present in the breeding seasons in 2018 and 2019, and there were more broods seen than for many years.

Shelduck were present almost daily in the first four months, with peak counts of 23 on 2nd and 15th February and 18 on 18 March; most on beds 3 and 4. By April many were paired; the maximum count being five pairs on No.4 bed on 2nd.

The first brood, of eight young, was reported on No.3 bed on 2 June, with two further broods on the same bed three days later. Others were seen throughout June, with the final one on No.4 bed on 28th. In all a record seven broods hatched, but how many fledged is not clear. Growing young were seen in late June, but the only report of full-grown juveniles was of three on the Loop of No.4 bed on 30 August.

Typically, numbers of Shelduck decreased in the second half of the year, with five on No.3 bed on 30 October the highest count received.

Mandarin Duck

Aix galericulata

Seven records were submitted for this duck, whose numbers are increasing on the Reserve. Although mainly seen in the Bollin Point area at the east end of No.1 bed, a drake was on the new wetland on No.4 bed in early May. A flock of 15 was present at Bollin Point on 10 December.

Garganey
Amber listed

Spatula querquedula

Amazingly, 68 records of this fine duck were reported between April and mid-September.

The first, a drake, was present on the Oxbow around No.3 bed on 22 March, with a pair there on 25th and 26th. On 26th a new pair was found on the Woolston Weir basin where they remained until 28th. On the same day another pair was on No.4 bed. Reports of pairs continued throughout April and May.

Breeding was strongly suggested, with a juvenile female present on No.3 bed on 21st July, an adult and a juvenile on No.4 bed a week later, an adult female with four juveniles was on No.4 bed on 4 August and a family party which was then seen daily until mid-September. The final report of the autumn was of three on No.3 bed on 13 September. Finally, two observers subsequently found a juvenile female on No.4 bed amongst a flock of 450 Teal on the exceptionally late date of 6 December.

Shoveler

Amber listed

Spatula clypeata

Shoveler were much more numerous than in recent years, especially early in the year and in the last four months. Despite this breeding was not proved.

During freezing conditions at the beginning of the year 158 were present on No.3 bed, concentrated in a small area of open water. Numbers remained high into February with a total of 167 across the whole Reserve on the WeBS count of 19th. Fewer were present into the spring, although 44 were on No.3 bed on 3 April, the majority paired. At the same time three drakes and two females were on the Loop of No.4 bed.

During May and June a few pairs were on Nos.3 and 4 beds, but once again without any evidence of breeding, which last occurred in 2015 and before that in 2007. It is a puzzle why this should be, although other wetlands in Cheshire, apart from occasionally Burton Mere Wetlands RSPB, rarely record broods of Shoveler either.

In September there was a major arrival, with 237 found on the WeBS count on 10th. This is the highest number of Shoveler recorded at Woolston since September 2009 when 270 were present. Many remained into October, with a further peak of 235 on 12 November, after which many departed.

Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
158	167	66	44	5	30	4	50	237	142	235	43

Gadwall

Amber listed

Mareca strepera

With 126 records submitted this was the most reported duck at Woolston in 2022. The mid-summer influx was higher than ever, resulting not only in a record count for Woolston but also for Cheshire. After a poor breeding season in 2021 there was a much improved showing this year.

Average numbers were present in the first winter period, with peak counts of 96 on 22 January, 106 on 15 February and 31 March, and 177 on 16 April. Most were reported from beds 3 and 4.

Gadwall pair early and as many as 26 pairs were on No.3 bed in late January. There were nine pairs on the Loop of No.4 bed on 7 May.

The first brood was reported on No.4 bed on 18 April, and three were on No.3 bed a week later. Many broods followed, with a total of 15 in all. This is an absolute minimum, however, for one observer found six broods alone on the wooded wetland in the centre of No.2 bed which is an area less well watched than the other three deposit grounds. In addition, broods can remain hidden from view. The pairs that bred there benefit from a lack of disturbance and are very productive – the six broods being two of nine young, one of eight and three of six. On 26 June at least 50 ducklings were reported to be on No.2 bed. Hopefully this water will be better watched in the 2023 breeding season.

What followed was amazing, with record numbers present on the Reserve in the annual mid-summer influx. This began in mid-June and 345 Gadwall were on No.3 bed alone on 26th. More continued to arrive, with 430 on 30 June increasing to 605 on 5 July and a remarkable 1015 on 12 July when 880 were on No.3 bed



and the remainder across the other three beds. The represents a new county record and was an amazing sight for the two observers. The huge numbers soon began to fall but 870 were still on No.3 bed on 23 July and a co-ordinated count of Nos. 3 and 4 beds on 6 September found 533.

In the remainder of the year much smaller counts were submitted – the most significant being 97 on the new wetland on No.4 bed on 7 November.

A dead drake Gadwall was found in front of the Linley Hide on 9 March, a probable victim of avian flu.

Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
96	106	106	177	180	430	1015	450	533	66	97	52

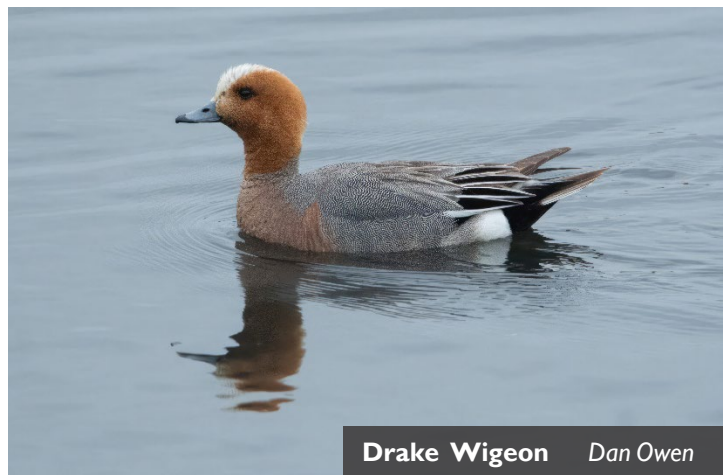
Wigeon

Amber listed

Mareca penelope

Wigeon are regular visitors to Woolston and are recorded in every month in small numbers.

There were just two double-figure counts, 12 on No.3 bed on 18 January and 10 on 8 September. Interestingly, a pair was present throughout May and into early June. Most sightings were of one or two birds.



Drake Wigeon Dan Owen

Mallard

Amber listed

Anas platyrhynchos

Although numbers throughout the year were down on the high counts of 2021 many broods were reported. In the cold weather at the beginning of the year 182 were present during the WeBS count on 22 January and several other counts in excess of 100 were reported into February. The first two broods were seen on No.4 bed on 20 April, after which many others appeared on all four beds. In total 23 broods were seen, distributed as follows: eight on the No.4 wetland, three on No.3 bed, four on the Mersey, two on the Oxbow and singles on No.1 bed, No.2 bed, Woolston Weir, the Sandpit Pond, the Loop of No.4 bed and the Ship Canal. This is an improvement on the 16 broods in 2021, 13 in 2020 and 20 in 2021. In addition three nests with eggs were found on No.1 bed, two with 11 eggs and one with seven. All three, however, were predated.

Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
182	130	85	67	26	20	55	46	146	125	131	115

Pintail

Anas acuta

Amber listed

Remains a scarce visitor to Woolston, with records in the first and last four months of the year. Most reported involved one or two birds, but four were present on No.3 bed on 23rd February. Two pairs settled on the Loop of No 4 bed wetland for much of March with display observed from both pairs on 12th. They were last reported on 28 March. Subsequently they were reported on both No.2 bed and the east cell of the new wetland on No.4 bed. At that time a female behaved as if there could have been a nest but there was no confirmation of this and no further records after 19 April.

In the autumn five flew high to the north over No.4 bed on 3 September. In October a drake flew over No.1 bed on 22nd and another drake overflowed the Reserve with a flock of Pink-footed Geese on 30th. The only other reports were of six over No.3 bed on 6 December and five were present on 10 December WeBS count.

Teal

Anas crecca

Amber listed

Wintering Teal numbers were again lower than pre-2020 levels, with no four-figure counts recorded. During cold weather in the first two weeks of January many of the pools were frozen and many Teal left the Reserve. At that time the maximum count was 260 on No.3 bed on 15th. With milder conditions more returned and 466 were found on the WeBS count on 22nd. At the end of January 300 were on the new No.4 wetland. The 276 on 15 February was the last significant count of the first winter period.

There was no evidence of confirmed breeding although six pairs lingered into late April, and eight drakes were on No.4 bed in mid-June.

By late July small numbers began to return, but it was early September before an influx occurred. Three hundred on 6 September had increased to 627 by 10th, which is the highest September count at Woolston since 2005. Fewer Teal were present in the rest of September and October until increasing water levels on Nos.3 and 4 beds after weeks of heavy rain attracted the year's highest count of 850 on 5 November. Five hundred were on the new wetland on 26 November and the maximum in December was 450 on 6th and 7th.

The ringing team caught five Teal in the duck trap on No.3 bed, which is a much lower number than in recent years, partly due to avian flu concerns and also the many months of low water levels on the bed. Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
466	276	130	41	2	8	32	65	627	300	850	450

Pochard

Red listed

Aythya ferina

The wintering numbers were similar to those in 2021, but Woolston continues to support a breeding population of national importance.

The highest numbers are always seen in the first three months of the year, with peak counts of 62 on 30 January, 53 on 8 February and the year's high of 85 on 5 March. Many soon moved on but over 30 were present on several dates into April, including 44 on 13th and 37 on 30th, 27 of which were drakes. While most were on No.3 bed some were regularly seen on No.4 bed and the Loop.

A brood of six small young was seen on No.3 bed on 22 May and a second of three the following day. Thereafter, more broods appeared regularly, with five on 4 June (all very small young) and six on 18th. Most bred on No.3 bed, but two broods were also noted on the Loop of No.4 bed. For many years a single pair has produced young on No.1 bed, but there was no evidence of this in 2022.

From careful observations it is believed that 16 pairs bred, 14 on No.3 bed and two on the Loop of No.4 bed. The most recent assessment of the national breeding population of Pochard by the Rare Breeding Bird Panel (2020) is about 700 pairs, so Woolston's broods in 2022 are clearly significant.

Typically, after the breeding season most Pochard depart and from early June to mid-November there were no reports until five were recorded on 12 November WeBS count. Six drakes on No.4 bed on the final day of the year was the only December record.

Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
62	53	85	44	20	31	3	n/c	n/c	n/c	5	6

Ferruginous Duck

Aythya nyroca

A rare visitor, a female was picked out by Dan Owen, among a flock of Tufted Ducks and Pochard, on No.3 bed on 30 April. It was subsequently seen, later in the day, by a number of observers. This is the sixth record for Woolston and the first since 1995.

Tufted Duck

Aythya fuligula

Wintering numbers were high, but there was an almost complete collapse of the breeding population, which is normally one of the most productive of Woolston's wildfowl.

The year began with large flocks on the Mersey and Ship Canal. On 13 January our Warden who monitors Woolston's Tufted Duck numbers found 417 across the Reserve. This had increased to 755 on the WeBS count of 22nd and a year peak of 843 on 27th. Over 800 were still present into February, and 362 were found on 15 March and 255 on 13 April.

By early May 25 drakes and 19 females were on No.3 bed, with many paired, and there were other pairs on the Mersey and Weir Pool. The first brood – a pair with one young – was reported on 18 June and three

others into early July, all on No.3 bed, while a female with four very small young was on the west cell of the new No.4 wetland on 7 July.

Of the total of seven broods none were seen again and it is likely that all were lost. This is unprecedented, as in recent years there were 19 broods in 2021, a minimum of 13 in 2020, 22 in 2019 and 11 in 2018. What, then, was the cause of this collapse in the Tufted Duck breeding numbers this year? The answer may well be weather-related. The lack of rain in the spring and summer and soaring temperatures in July led to very low water levels across the Reserve and it is interesting to note that the relatively small number of broods in 2018 occurred in very similar conditions. The very low water levels may well have reduced breeding opportunities and food supply.

In the second half of the year the only significant counts received were 56 on the 6 October WeBS count and 100 on the WeBS of 12 November. The bitterly cold weather in the second week of December, when the main pools froze over, predictably resulted in an influx, with 540 on the Mersey and Ship Canal on 10th.

Monthly maxima:

J	F	M	A	M	J	J	A	S	O	N	D
843	817	362	255	53	45	2	1	53	56	100	540

Goldeneye

Bucephala clangula

Red listed

Goldeneye are becoming increasingly scarce at Woolston and just 19 records were submitted for the whole year. Eight at Bollin Point on 18 January was the highest count of the year, with only one or two reported up to 15 March.

The first returning birds were two on 29 November, and there were no more than two on four dates in December. All bar one of the sightings were on the Mersey or at Bollin Point on the Ship Canal.

Goosander

Mergus merganser

The nine records submitted were above the annual average, with three in the first three months and the remainder in September, October and December. Most were of single birds, but there were three counts of two and the maximum was three juveniles in front of the Morgan Hide on No.3 bed on 18 October.

Ruddy Duck

Oxyura jamaicensis

It was a major surprise when a drake was found on the Loop of No.4 bed on 3 June. It remained there until 12 July, after which it disappeared. Interestingly, it reappeared on the west cell of the new wetland on 11 August, but was not seen again. During its lonely stay it was seen displaying on a number of occasions.

This is the one and only record at Woolston since 2019.



Cuckoo

Red listed

Cuculus canorus

A disappointing year with only four records and no evidence of successful breeding. The first sighting was on 2 May when one was present on No.2 bed. The next day one flew past the window of the John Morgan Hide on No.3 bed and was later heard singing from near the Tower Hide. Then, on 19 May, one was heard calling on No.2 bed. Finally, on 31 May one was calling on No.4 bed.

Swift

Red listed

Apus apus

The first sighting of the year was of one on No.3 bed on 27 April, a fairly typical date. Over the next week they continued to arrive in small numbers and it was not until 7 May that there was a significant movement with 21 passing through during the morning. The largest movement was on 12 May when 485 flew through. Other notable counts in May were 120 on 14th, 150 on 24th and 200 on 26th.

In the summer months breeding birds from the nearby Westy estate were regularly seen feeding over the new wetland on No.4 bed. Peak counts were 60 on 18 June, 80 on 12 July and 120 on 19 July. It appears that the Swift population in Westy is one of the few that is thriving, not just in Warrington but across the country. The work of local conservationist Karl Green deserves highlighting. Karl has been engaged in important conservation work on the estate through monitoring the numbers of occupied nest holes (a minimum of 50 in just four/five streets) and making and erecting nest boxes. He has great plans for the 2023 breeding season including working with local school children to make them aware of the Swifts and the importance of the Westy estate for their breeding.

The first evidence of summer departure was on the morning of 30 July when 955 flew west over No.3 bed. This was followed by, in August, 130 on 2nd, 80 on 3rd and 85 on 6th, with all moving south. The final sighting was of four on 30 August.

Feral Pigeon

Columba livia

Feral Pigeons are resident on the Reserve and breed on the Thelwall Viaduct and in the vicinity of Latchford Locks. This was a typical year with a peak count at the locks of 200 on 27 November. Smaller numbers reside on the Viaduct and the maximum was 15 on 20 October. Overflying birds are a regular sight on the Reserve and the maximum noted was 10 over No.4 bed on 20 October.

Stock Dove

Amber listed

Columba oenas

A typical year for this species with small numbers observed on all four beds throughout the year. During the Breeding Bird Surveys, four pairs were seen displaying on No.2 bed, two pairs were present on No.3 bed and one was heard singing on the west bank of No.4 bed. The maximum counts were from No.1 bed which include birds from surrounding farmland. Twenty-two were seen there on 16 July and 52 on 3 December during a Migration Watch.

The ringing team on No.1 bed caught their first since 2019, a breeding condition male ringed on 20 May. On No.3 bed one was also caught (hatched in 2021) on 30 April. This is a fairly typical date but is below the average of three per year for this bed.

Woodpigeon

Columba palumbus

Amber listed

Woodpigeons are a common resident and breed on all four beds. Counts from the Breeding Bird Surveys were: 16 on No.2 bed including five in display flight, 20 on No. 3 bed with six in display or song and 42 on No.4 bed including 15 pairs. In the first winter period there were roosts on both Nos.3 and 4 beds. Two hundred left the roost on the north bank of No.3 bed on 15 January and 150 were seen at a roost gathering on No.4 bed on 9 March. There were some spectacular movements in the second winter period. The first significant count was on 14 October when 400 flew south over No.1 bed. Birds were also seen roosting on No.3 bed with 360 leaving a roost there at dawn on 18 October. These counts were eclipsed on 25 October when 10,400 were seen moving south over No.4 bed in the first two hours after dawn. Other significant movements included 5,300 moving south over No.4 bed on 12 November and 5,300 moving north over No.3 bed on 20 December.

On No.1 bed just a single bird was ringed, a second-year caught on 27 May. On No.3 bed a single adult bird was ringed on 9 January; this is below the average of 4.6 birds per year.

Collared Dove

Streptopelia decaocto

Collared Doves are only occasionally seen on the Reserve and there was no evidence of breeding this year. There were 26 records submitted and typically, all but one was overflying. The exception was two seen drinking on the edge of the west cell of No.4 bed. Overflying birds were seen throughout the year with a maximum count of three. Most were seen flying over No.3 and No.4 bed but there were two records from No.1 bed in March where sightings are uncommon.

Water Rail

Rallus aquaticus

The population of this secretive resident would appear to be stable and there were reports throughout the year, mostly from Nos.1 and 3 beds. It was encouraging to have sightings on the new wetland area of No.4 bed where three were heard calling on 8 March. With three other records from No.4 bed it would appear that they are beginning to colonise this area. The year began with three on No.3 bed on 6 January and four on No.1 bed the following week. On 16 March two were on No.1 bed and 10 days later six were found on Nos.3 and 4 beds. On 24 May a juvenile was seen in front of the Tower Hide on No.3 bed and five adults were heard calling around that bed on two dates later that month. An adult with five young was reported from the Frank Linley Hide on 10 June and single juveniles were present on No.3 bed on two dates in August. A nest with eight eggs was also found on No.1 bed. Just three pairs were confirmed to have successfully bred, though the reserve population is known to be 20-30. Records continued until the end of the year with a total of nine present on the WeBS count of 10 December, the highest of the year.

Four were ringed: one on No.1 bed, an adult female on 21 January; and three on No.3 bed, all adult males on 25 August, 3 December and 31 December.

Moorhen
Amber listed

Gallinula chloropus

Numbers were remarkably consistent throughout the year with all the highest totals coming on the WeBS counts. These produced maxima of 31 in January, September and November. This probably confirms that this species continues to be under-recorded at Woolston. There appears to have been a decline in the past two years from a year maximum of 55 in 2020. Breeding however showed an improvement and a minimum of eleven broods was found. As usual the majority were on No.3 bed but two were seen on the new wetland area of No.4 bed and a chick was reported from the river near the Weir. In 2021 only five or six broods were seen, all on No.3 bed.

On No.3 bed a colour ringing project was started and a total of 19 birds were fitted with orange numbered Darvic rings. Information on sightings of such birds would be much appreciated. Of the 19 ringed between 3 August and 31 December eight were birds of the year and 11 were adults.

Coot

Fulica atra

This species recovered well after a poor year in 2021 and numbers were back to those seen two years ago. The year began with 48 on Nos.3 and 4 beds and the Canal and by the end of the month 117 were found on the WeBS count. February's co-ordinated count produced 131 and by late March signs of breeding were observed when a pair was seen mating on the No.3 bed scrape. Another pair was on a nest at the Weir Pool on 11 April and the first broods were noted on 23rd. This proved to be the start of a good breeding season and, although it is always difficult to produce an accurate total of broods, the evidence suggests that a minimum of 35 successful broods were across the Reserve. As always, the majority were on No.3 bed (c.23) and the rest were distributed as follows: one Mersey, two No.1 bed and nine No.4 bed (two Sandpit Pond, three new wetland and four Loop). The usual post-breeding build up was noted and by the end of June 175 were on No.3 bed alone. The year maximum occurred on 18 August when no less than 345 were feeding on water weed on No.4 bed. No doubt others were present in the rest of the Reserve at that time so this is certainly a bare minimum. Later totals included 85 and 75 on the September and December WeBS counts.

Three were ringed on No.3 bed, one in August and two in December.

Little Grebe

Tachybaptus ruficollis

This was another excellent year for Little Grebe, with last year's record count exceeded in the spring. Broods were reported across the Reserve, but there were fewer than in 2021.

As always, only small numbers were recorded in January and the first half of February, and it was the 19 February before numbers began to increase, with 14 being found across the Reserve during the WeBS count. In early March trilling was heard on No.1 bed, and then throughout the month when 29 Little Grebes were on beds 3 and 4, 17 of which were on No.4 on 15th. The importance of the new No.4 wetland for this grebe was apparent when another observer found 37 on the Reserve on 17 March: six on No.1, two on No.2, 17 on No.3 and 12 on No.4, which equalled the record count in 2021. On 22 March, however, this was exceeded when 39 were present, 17 on No.3 and 22 on No.4 bed. 38 were still on the Reserve on 26 March, and up to 20 on No.4 bed on 12 April.

The first brood was seen on No.3 bed on 4 June, when an adult was feeding three half-grown young, a brood which must have been missed earlier. Two days later a pair with two very small chicks was found on No.4 bed, and a third brood, an adult feeding a half-grown young, was in front of the Rotary Hide on 2 July. On 30 July two adults with four fully grown independent young were present on No.3 bed. The low number of broods this year seems a poor return from the number of adults present in the spring, but in addition to the three broods detailed above one was also reported on No.1 bed and it is likely that two pairs bred in the centre of No.2 bed.

Following the breeding season large numbers were recorded on three autumn WeBS counts: 25 on 10 September, 24 on 6 October and 22 on 12 November.

Great Crested Grebe

Podiceps cristatus

An improvement after several disappointing years, with many pairs present in spring and more young fledged.

In the early weeks when it was cold this grebe was scarce at the Eyes, but as milder weather returned numbers increased, and 14 were found on 22 January WeBS count. Thereafter, there were fluctuating counts, mainly in single figures, but a pair was seen nest building on No.3 bed on both 8 and 10 February. By early March more birds had arrived, with peak counts of 20 on 10th and 21 on 19th. Great Crested Grebes were widespread across the Reserve, including three pairs on the Ship Canal, the annual pair at their precarious nest site at Woolston Weir and two nests with sitting birds on the Mersey below Nos.1 and 2 beds respectively. An additional two pairs were present on No.3 bed, making a minimum of eight pairs.

The first brood, of two small young, appeared on No.3 bed on 11 May, while on 17 May an adult was feeding a quarter-grown chick there, a brood that must have been missed earlier. Two days later a pair was displaying on the west cell of No.4 bed but was never seen again. It is likely that there was little food for them in this new wetland. At the end of May the pair on the Weir Basin was feeding three large young, of which at least two subsequently fledged. From this point breeding activity was focussed on No.3 bed. On 4 June a new brood of two very small young was on the bed, while six days later two adults were on nests. The following day two separate adults were each feeding single growing chicks. This would suggest a minimum of four, possibly five, breeding pairs with young on No.3 bed at that time. The only other pair that raised young was the one on the Weir Basin. Sadly, the outcome of the two nests on the Mersey is not known.

After June there were only a few records submitted, the last juvenile being seen at the end of July. Most of the subsequent reports came from WeBS counts, the maximum being eight on 12 November.

Black-necked Grebe

Podiceps nigricollis

Those privileged to monitor the Black-necked Grebe population at Woolston in 2022 witnessed what was almost certainly the most remarkable breeding season at any site in the United Kingdom since this rare grebe first bred, in Wales, in 1904.

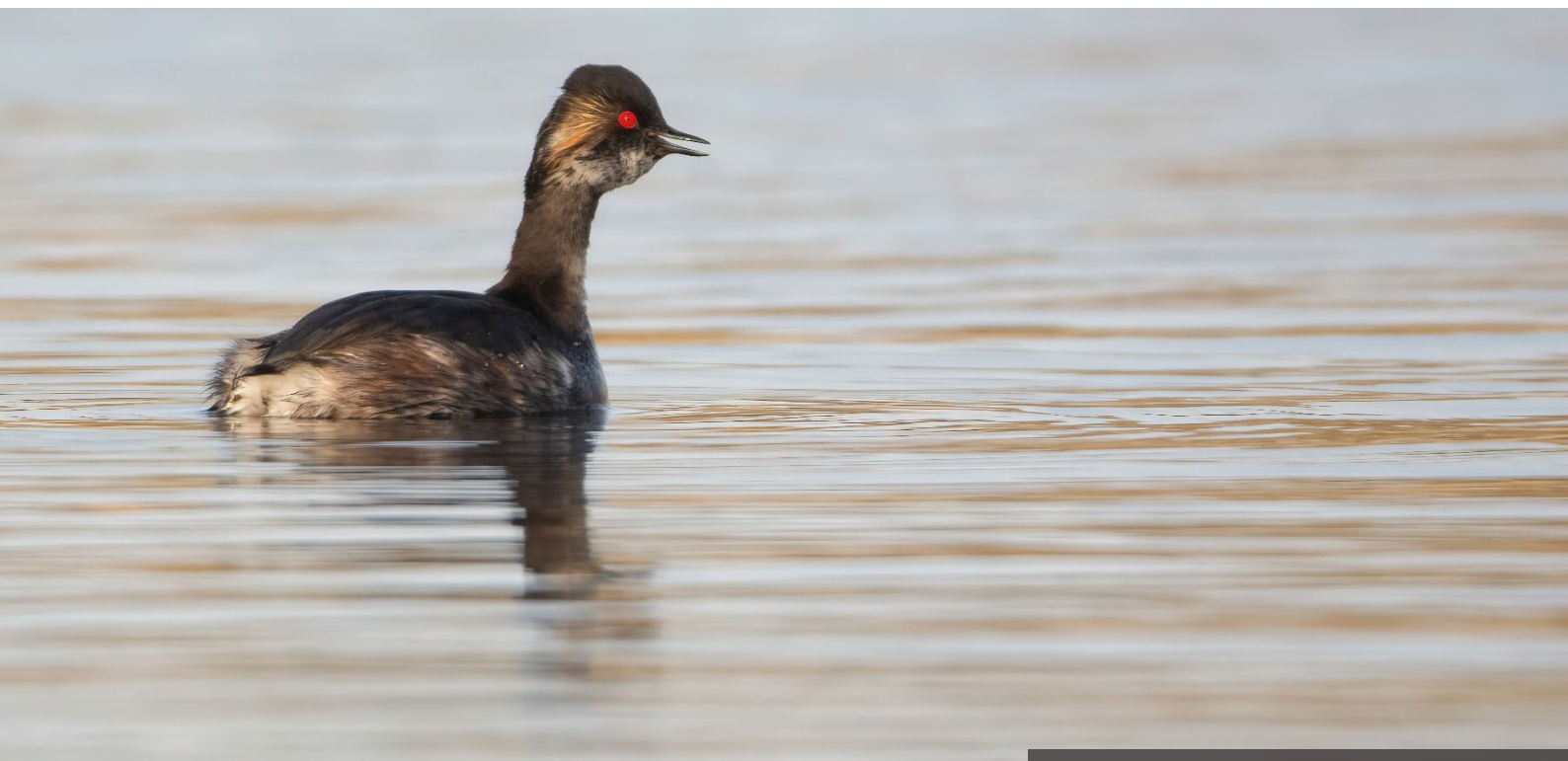
Five on 5 March, our earliest ever date, were the first to return, two on No.3 bed and three on the west cell of No.4 bed, all in various stages of their moult into full summer plumage. During the rest of March birds continued to arrive and numbers reached double figures by the end of the month. Peak counts were 21 on 24th and 25 on 26th - 14 of which were on No.4 bed. In fact, five displaying pairs were on the west cell at that time and at least 16 were there on 29 March. This follows the behaviour of birds in 2021 when many favoured No.4 bed before all eventually bred on No.3 bed. This was not before a pair looked interested in nesting in a small *Phragmites* bed on the west cell and a second pair on a small pool on the east cell.

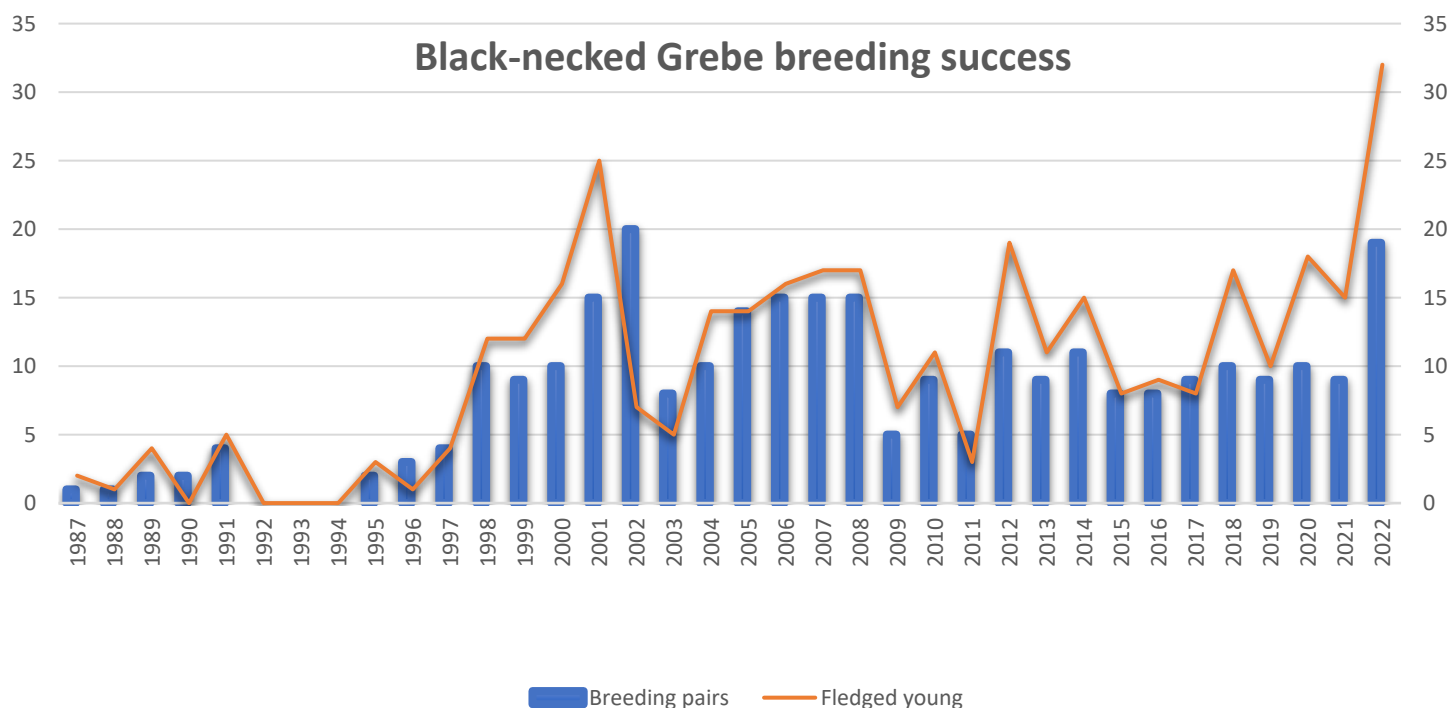
Until Black-headed Gulls settle to breed on the No.4 bed islands this is likely to be a pattern that will be repeated. By mid-April an absolute minimum of 29 adults were counted, with more on nests.



Black-necked Grebes Dan Owen

Typically, the first broods appeared in mid-May, three on 16th, five on 16th, and eight pairs with young were recorded on 21st. During this time there was another arrival of up to eight adults, displaying and generally very interested in quickly settling down to breed. From this point numbers of adults and young increased dramatically. On 24 May a total of 40 adults and young was present on No.3 bed, 22 adults, and 18 young in 11 broods – one of three young, five of two young and five with a single chick. Remarkable though this was it was soon exceeded by 37 adults and 27 young, in 15 broods two days later. It seems likely that the overall total of young was higher, for another experienced observer present at that time on No.3 bed counted 32 young, which would have given an overall total of 69 adults and young on No.3 bed that day, surely the highest number ever on a wetland in this country!

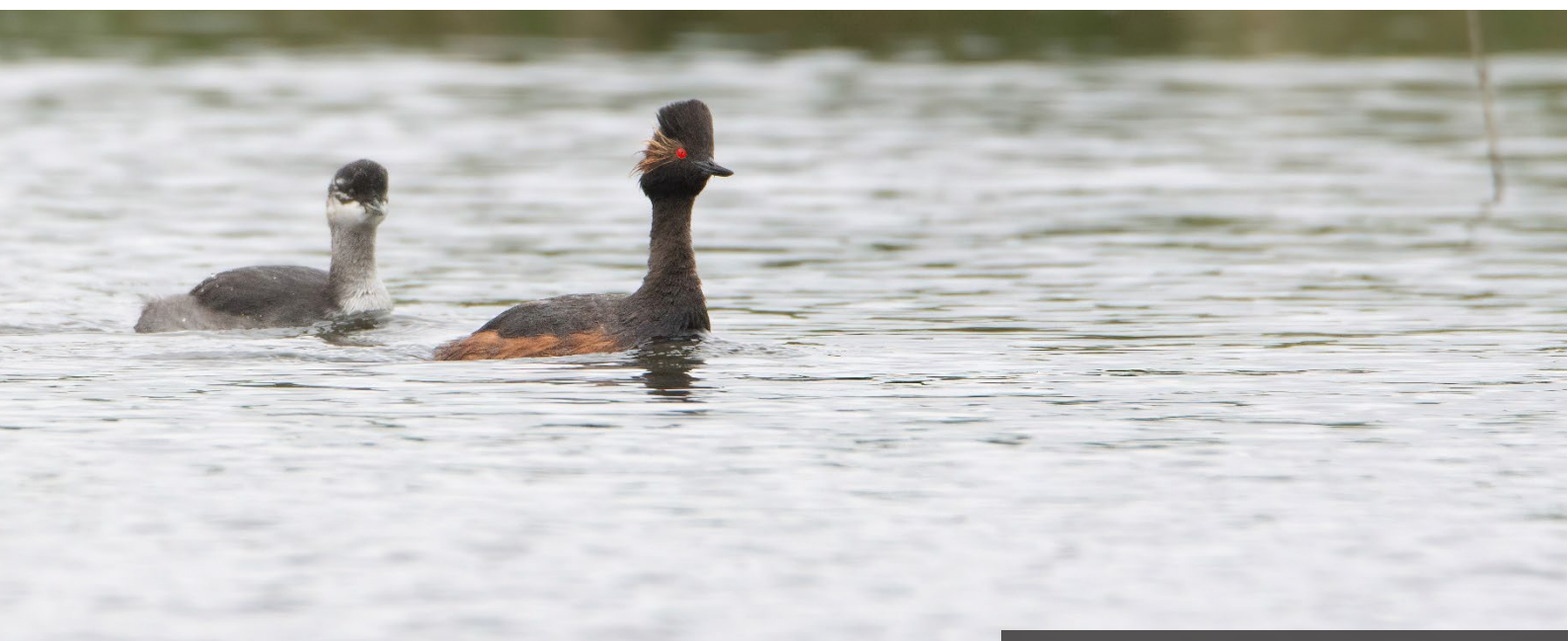




Another Woolston record was set on 28 May when 16 broods were located, and by 7 June a regular counter found 17 semi-independent young on No.3 bed. It was clear that the food supply was good on No.3 bed, with many broods of three young raised, which is relatively uncommon. By 8 June the first fledged juvenile had moved to a small pool on No.4 bed, where it was harried by an adult Lesser Black-backed Gull.

Large numbers continued to be recorded up to the end of June, with a co-ordinated count on 18 June locating a total of 54 adults and young; 31 young alone were on No.3 bed on 21 June. One of the fine sights at this time was the short test flights of the young low over the water to strengthen their flight muscles prior to departure and eight were doing just this on 28 June. During July many of the dispersing young - and some adults – moved on to No.4 bed, where some remained until mid-August.

After a full assessment it is believed that as many as 38 adults summered at Woolston this year, and at least 32 young fledged from 19 broods, totalling 39 young. With the only other significant Black-necked Grebe breeding population in the country having, by its standards, a poor year in terms of breeding success, Woolston was by some margin not only the most important breeding wetland in 2022 for this grebe, but historically the most productive ever in the United Kingdom.





Oystercatcher

Amber listed

Haematopus ostralegus

The first sighting came on 9 February, a fairly typical date, when one flew east over No.1 bed. Two days later two were on No.3 bed and regular reports followed with four pairs noted on 15 February, three on the new wetland and one on No.3 bed. Six were present on 10 March. There was no evidence of breeding, however. No more than three were then seen with most sightings on Nos.3 and 4 beds. Three juveniles were on the scrape in front of the John Morgan Hide on 19 July and the final report of the year was on 9 August.

Lapwing

Red listed

Vanellus vanellus

The year began with reports of 65 on No.3 bed on 2 January and 60 on No.4 bed the following day. The new wetland proved particularly attractive and 420 were on one of the islands on 29 January rising to 550 on 2 February. Three displaying pairs were on No.3 bed on 22 February and on 1 March three pairs were displaying on each of the two cells of the new wetland area of No.4 bed. Early March saw 250 in the same area but numbers then decreased with the start of the breeding season. A maximum of 12 pairs was observed displaying on No.4 bed on 19 April, including a pair on the Loop. The first broods were seen on No.4 bed on 9 June when two pairs with young were noted: one with two half-grown young and one with one very small chick. A further brood of one small young appeared there on 5 July, making a total of three. This compares with four broods in 2021. There was no evidence of breeding having taken place on No.3 bed this year. The usual post-breeding build up was unspectacular with a maximum of 115 on No.4 bed on 30 August. Over-flying flocks included 200 on 15 October and 390 on 27 October, both flying west over No.3 bed. There were no subsequent three figure counts.

White-tailed Lapwing

Vanellus leucurus

This national rarity was found on the new wetland area of No.4 bed on 31 May by Mike Lloyd and was subsequently viewed by a number of observers. It remained until nightfall but had moved on by the following morning. A first for Woolston and Cheshire, it had been widely reported from a variety of sites in England. It breeds in Iraq, Iran and Southern Russia and is a rare vagrant to western Europe.

Golden Plover

Pluvialis apricaria

A scarce visitor in recent years, there were just two reports: one flew west over No.1 bed on 31 January and on 31 October two, which were thought to be of this species were on the new wetland. As they were seen at some distance it was not possible to be certain of their identity.

Grey Plover

Amber listed

Pluvialis squatarola

A single record of this rare visitor was the first since September 2016. On 20 August one in full summer plumage landed briefly in front of the John Morgan Hide before continuing to the west.

Ringed Plover

Red listed

Charadrius hiaticula

For the first time since 1993 a pair bred on the Reserve although sadly the nest with four eggs was predated before any young hatched. The pair was attracted to suitable breeding habitat on the new wetland where they were first seen on 18 April. On 28 April they were seen mating and by 2 May they were on the nest. Four eggs were seen on 7 May but the following day the nest had been predated. The breeding pair remained and was last seen on 19 May. On 12 May three birds showing characteristics of the *tundrae* subspecies (*Charadrius h. tundrae*) dropped into the west cell and were chased off by the resident pair, with a further three *tundrae* birds flying through on 14th. There were sightings of singles on 30 May, 14 June and 2 July and the final report of the year was of three on No.4 bed on 6 and 8 September.

Little Ringed Plover

Charadrius dubius

This summer visitor has become a regular breeding species in recent years and this year 69 records were submitted between March and September. The first reports were from No.1 bed with two on 11 March and three on 19th. The following day one was on No.4 bed and three were present there on 26 March. Pairing was noted from early April with two pairs on No.4 bed on 12th and three pairs displaying there on 14th. A pair was found on No.1 bed on 23 April, and one was on fields to the north of No.2 bed on 26th. A further pair was on a nest on No.3 bed on 8 May, so it seems that a minimum of nine were present at this time. The first brood appeared on 20th June when an adult and four recently hatched chicks were found on No.1 bed. On 28 June three adults and two free-flying young were seen on the west cell of the new wetland on No.4 bed. Somewhat surprisingly, three (thought to be the adults) took off and flew south gaining height before disappearing from view. Two adults and three juveniles were in the same area on 5th July and an adult and five juveniles dropped in to the west cell on 16th. The 22 July saw nine including five juveniles on No.4 bed whilst on No.1 bed one adult was on the west pool on 15 July. A juvenile was on the scrape in front of the John Morgan Hide on No.3 bed on 22 and 23 August and there was a further record of a juvenile on No.4 bed on 3 September. The final report of the year was on 10 September. From the information received, it seems reasonable to conclude that a minimum of four pairs bred successfully although breeding was not confirmed on No.3 bed.

Whimbrel

Red listed

Numenius phaeopus

With just three records this species remains an infrequent visitor. At dawn on 16 April five flew over the car park calling. The other sightings were from No.4 bed, with one on 3 May and another on 22 July.

Curlew

Red listed

Numenius arquata

Very similar to 2021 there were twelve records submitted, most related to birds over-flying the Reserve, with just three sightings on the ground in the new wetland area. All were from Nos.3 and 4 beds. The first report was of one flying east at dawn on 24 February. One was on the new wetland on 5 March when a few bursts of song were heard. On 12th eight flew low to the south in the same area, some singing. Early April saw six and three flying east on 5th and 14th and one was on No.4 bed on 29th. There were no further reports until July when there were three sightings of singles, all over-flying, with the final sighting on 30 July.

Black-tailed Godwit

Limosa limosa

Red listed

Unusually there were no spring records but there were numerous sightings from July onwards. The first was on 2 July when 14 flew west over No.3 bed. All subsequent reports were from Nos.3 and 4 beds except for a single on No.2 bed on 24 October. On 28 July 14 were on the west cell of No.4 bed and numbers increased during August peaking in early September when 30 or more were present on three different dates. The year's maximum was of 37 on 6th and then numbers decreased with 10 on No.4 bed on 6 October and a final record of one on 26 November. Most of the returning birds were juveniles and this represents an improvement for this red-listed species, compared to 2021, when most records related to overflying birds with a maximum of 23.

Ruff

Calidris pugnax

Red listed

There were just three reports of this occasional visitor; on 30 June two circled No.3 bed before flying off to the west and on 2 July an adult male was on the west cell of the new wetland. The final sighting was of two juvenile males on No.3 bed on 6 September.



Juvenile Ruff Dan Owen

Temminck's Stint *Calidris temminckii*

The new wetland confirmed its attractiveness to passing waders when one dropped onto the west cell of the No.4 bed wetland, in company with a Dunlin, landing just in front of the viewing platform on 28 April. This is the first record of this rare visitor since 1989.



Temminck's Stint (left) and Dunlin (right)

Dan Owen

Sanderling
Amber listed

Calidris alba

A rare visitor to the Reserve, there was a single record, the first since 2019. One dropped in to the west cell of the new wetland on 14 May a further confirmation of the attractiveness of this area for waders.

Dunlin
Red listed

Calidris alpina

With 19 records submitted this was a good year for this red-listed species, although many sightings were of over-flying birds. Most reports were from No.4 bed but there were three from No.3 bed and one from No.1 bed. A single in summer plumage on the west cell of the new wetland was the first of the year on 28 April and what was presumably the same bird was still there the following day. On 12 May no less than 34 flew north during the morning in small groups, passing low over the water on the west cell, some stopping to feed. Five were reported on No.4 bed two days later whilst a single was on No.3 bed on 16 May. Reports continued through June and July, again from No.4 bed, and return passage was noted through to the end of October. One was on the Loop of No.4 bed on 3 September and a week later one landed on the west cell. The final sighting was from No.1 bed where one dropped into a pool on 20 October.



Woodcock
Red listed

Scolopax rusticola

Twenty records of this red-listed species were submitted, covering the first and last three months of the year, which is typical. Sightings were from all areas of the Reserve but mainly from Nos.1 and 3 beds, which are the strongholds of this often-elusive species. On 5 January two were on the Canal Track on No.1 bed and a further two on the track on No.2 bed. One was then on No.3 bed on the same day. The following day two flew over the entry barrier at dawn. January saw further sightings of one or two, including a melanistic bird flushed from the eastern end of the recycling area on No.1 bed. There were single records

in both February and March, both on No.1 bed. Intriguingly, a freshly moulted Woodcock feather was found in No.3 bed on 16 July, implying the presence of a moulting adult. There were no further records until 13th October when one was found on the south bank of No.3 bed at dawn. Two were seen on the December WeBS count and three were on No.1 bed on the 14th. The final sighting of the year was on 27 December when two were on No.3 bed. This year's records were typical and it would appear that the population remains stable.

Jack Snipe

Lymnocyptes minimus

Although the exceptional numbers present in 2021 were not repeated it was still an excellent year for this elusive species which appears to be becoming more prevalent on the Reserve. January saw a number of records from Nos.1 and 4 beds with up to three on No.4 bed and two on the northern section of No.1 bed on 31st. Three were again on No.4 bed on 7 February and one on No.1 bed on 9 March. There were no further sightings until 6 October when the WeBS count produced a Reserve total of three. Up to three were on the west cell of the new wetland on No.4 bed during October and one was flushed from a pool on No.1 bed on 20th. One on No.1 bed on 4th November was followed by the highest count of the year on 3 December when nine were located in a small area around the elevated pools on No.1 bed.

Snipe

Gallinago gallinago

Amber listed

There were reports from January to the end of May and from early July to the year end, with sightings from Nos.1, 3 and 4 beds. On 6 January five were on No.4 bed and one on No.3 bed. A series of reports from 13 to 17 January included 16 on No.4 bed, 16 on No.3 bed and 11 on No.1 bed. Assuming these were different birds a total of 43 proved to be the highest of the year. On 26th March 24 were on the west cell of the new wetland and 16 were in the same area on 12 April. From then on only ones and twos were seen until 23 May. As usual there was a gap until 9 July when one was on No.4 bed. Significant counts during August included 17 on the John Morgan Hide scrape on 9th and 16 on No.4 bed on 23rd. There were then no counts in double figures until the WeBS count on 6 October which resulted in a Reserve wide total of 21. Later in the year there were reports of eight on 20th October and 11 on 3 December, from the northern section of No.1 bed. There were three double-figure counts in December: 11 on the new wetland on 8th, 12 on No.3 bed on 6th, and 13 on the new wetland on the same date. Overall numbers were down in comparison with the previous year when a maximum of 89 was recorded.

An adult female was caught in an unset duck trap and ringed on No.3 bed on 17 September.

Common Sandpiper

Actitis hypoleucos

Amber listed

The 35 records submitted represented an upturn in the fortunes of a species that is normally only seen on passage and there were sightings from the end of March to mid-September. The vast majority were from the new wetland on No.4 bed but there were also four reports from No.3 bed. The first was on 26 March and although most sightings were of singles up to three were seen on a number of occasions. A breeding pair was on No.4 bed on 12 May and three days later one was displaying in the same area. On 25 June one was heard giving alarm calls and this could indicate that breeding took place although no young were seen. If breeding did take place this would have been the first time since 1986. The final report was on 13 September.

Green Sandpiper

Amber listed

Tringa ochropus

As there were records up to the end of 2021 it was surprising that no over-wintering birds were seen in the first winter period. In recent years this has become the most common sandpiper at Woolston and this year was no exception with 64 records submitted. The first sighting was of two on No.4 bed on 26 March. Most records were from the new wetland but there were some on Nos. 1 and 3 beds. Spring passage was observed from March to the end of April with one on the east cell of No.4 bed on 28 April. There was then a gap until the beginning of autumn passage on 9 July. There were regular reports during the rest of July and numbers increased to a year maximum of six on No.4 bed on 28th. August saw almost daily sightings on Nos 3 and 4 beds. Small numbers were present during September with a maximum of four on 20th and there were just four further records. The November WeBS count produced a total of three and singles were found at Bollin Point on 2nd December and the last of the year on 10th.

The ongoing colour ringing project on No.3 bed continued and three juveniles were ringed: two on 13 August and one on 3 September. The channel used to trap these birds had become overgrown with willow and *Phragmites*, which were cut back in December to attract greater numbers next year.

Redshank

Amber listed

Tringa totanus

There were 15 records, many from the new wetland on No.4 bed, which is proving attractive to many species of wader. A single on No.1 bed on 14 March was the first of the year and was followed by a number of sightings on No.4 bed. Two on the new wetland on 19 March included a displaying male and the pair was still present five days later. By 26th only one remained and singles, possibly the same bird, were then reported until 14 April. Return passage started with one on No.3 bed on 23 July, with two on No.4 bed on 18 August and two on No.3 bed three days later. A Migration Watch on 27 August from the viewing platform on the new wetland produced two. The only other report was on the late date of 13 December when one flew west over No.3 bed.

Wood Sandpiper

Amber listed

Tringa glareola

A rare visitor, although there have been sightings in six of the last seven years, there were records in spring and autumn. On 19 April one circled the east cell of the new wetland before continuing high to the north. This is the earliest ever record of this species for the Reserve. A juvenile was on the west cell on 21 July and an adult dropped into the same location later in the day. What was presumably the same bird was seen in the same location two days later.





Juvenile Greenshank

Dan Owen

Greenshank

Tringa nebularia

Amber listed

Normally seen on passage, there was one spring record and seven between mid-August and mid-September. On 15 May one was on the east cell of the new wetland. August saw four sightings with two on No.3 bed on 13th and two on No.4 bed on 30th. During early September singles were reported from both Nos.3 and 4 beds and the final record was of two on No.4 bed on 13th.

Kittiwake

Rissa tridactyla

Red listed

An adult quickly overflying No.3 bed on 12 April was the sole record this year, continuing the excellent run of records of this coastal gull.

Black-headed Gull

Chroicocephalus ridibundus

Amber listed

It was a typical year for what is an important aspect of Woolston's ecology. The year started strongly with a count of 1,557 on 6 January, including 1,367 flying east over No.3 bed at dawn. Several four-figure counts were made throughout the month and counts soon translated to more birds present than overflying. By mid-February, 350 were counted on the western cell of No.4 bed and 780 were across the Reserve by 4 March. Early April saw some of the highest counts, as is often the case, with our own birds becoming settled at the colony and many birds passing through to colonies further north. An influx on 5 April saw 940 present on No.3 bed alone and 1,000 were present the following day. A smaller number were present on No.4 Bed during this time, never totalling more than 100. The nest rafts on No.3 bed always prove popular and 2022 was no exception, which makes counting the nesting pairs a little easier, though many more remain within the reedbed. On 21 May, 175 pairs were noted on occupied nests, with a similar number suspected to be concealed within the reeds. Counts of the latter can be estimated by the number of adults that take to the air when a predator encroaches. It is hoped that a drone may be used in a future breeding season, to get a better handle on the number of nests.

The first fledged juveniles were noted on 10 June and by 21st, 62 were counted on No.3 bed. Breeding productivity is never high, for various reasons, mainly predation. It is currently unknown what the main culprit is, with Lesser Black-backed Gulls noted to take chicks each season, though American Mink is likely to have a greater impact. By August most of the colony had moved elsewhere and numbers remained low until the autumn. The next triple-figure count came on 6 October, when 142 were noted across the Reserve during the WeBS count. At dawn on 20 October, 450 flew east over No.1 bed and the year ended with a good count of 1,100 east over No.1 bed during a migration watch.

Mediterranean Gull

Ichthyaetus melanocephalus

Amber listed

There was a step-down from last year's dizzy heights, although 2022 was still a great year for this species. The first record came on 3 March – a particularly early date. In fact, March turned into a great month to catch-up with this attractive gull, with some 19 records and a peak count of four on No.3 bed on 26th. Numbers remained consistent throughout April, when the year's peak count of five was recorded on 19th. Two adults over No.3 bed on 12 June rounded off the year.

Common Gull

Larus canus

Amber listed

It was a typical year, with records throughout the year. Numbers remained low but steady throughout the first winter period, before passage peaked in early April with 10 on No.3 bed on 3 April and a high count, for Woolston, of 33 on 5 May. July saw no records, otherwise numbers remained low, apart from a count of nine at Latchford Locks on 17 December.

Great Black-backed Gull

Larus marinus

Amber listed

An impressive 49 records were received this year, with sightings from every month of the year, as this species continues to go from strength to strength. The largest numbers are always found during the winter months, when they disperse from nearby overnight roost sites and the early winter period saw a peak count of 17. As with last year, breeding in the local area was suspected early on, with a pair of adults regular loafing on No.4 bed and behaving territorially towards other gull species. Suspicions were confirmed in late July, when a pair of adults were accompanied by a fresh juvenile bird. Early August saw a pair of adults with two fresh juveniles on No.3 bed, whether this relates to the same family party or whether two pairs bred in the local vicinity isn't clear. The year's peak count came on 22 November, when 52 flew east over No.4 bed throughout the morning.

Herring Gull

Red listed

Larus argentatus

Never as numerous as Lesser Black-backed Gull, but present throughout the year. Flyover records constitute the bulk of reports in winter, with a count of 56 over No.4 bed on the morning of 25 January. However, the construction of the wetland on No.4 bed has seen a rise in birds on the water and several can usually be picked out among the loafing gulls. Numbers remained low but stable throughout the breeding season, and the presumption is these are birds breeding within the Lesser Black-backed Gull colony north of the Reserve and eight were counted on No.4 bed on 28 June. August sees the arrival of a handful of juveniles among the hordes of fresh juvenile Lesser Black-backed Gulls but it isn't until the late autumn until numbers rise, typically from mid-October onwards. The highest count of the year came on 3 December, when 101 were logged on a migration watch on No.1 bed, and it is presumed these are birds flying from a roost elsewhere.

Yellow-legged Gull

Amber listed

Larus michahellis

The Reserve saw another increase in records of this smart Mediterranean species. Firstly, a third-summer was loafing with Lesser Black-backed Gulls on the western cell of the No.4 bed wetland on 17 May. The second sighting of the year came in the form of a juvenile on No.3 bed on 6 August, among the typical arrival of fledged Lesser Black-backed Gulls from the nearby breeding colony. This is believed to be the first record of this age-class for the Reserve.



Juvenile Yellow-legged Gull (front) (all) Dan Owen

Lesser Black-backed Gull

Larus fuscus

Amber listed

Undoubtedly the commonest large gull for the Reserve, and records were received throughout the year. January saw a count of 14 on 6th, though it wasn't until later that month and into February that numbers increased further, with a count of 30 on 2 February. A count of 62 across the Reserve on 15 February was a clear indication that the first migrant birds had returned, a little on the early side. The WeBS count on 19 March produced a Reserve total of 100, and 92 were present on No.4 bed alone on 5 March. Numbers were steady throughout the breeding season, with loafing non-breeders ever present on most beds, joined by adults from the local colony throughout the day. The first juveniles arrived on No.3 bed on the early date of 5 July, and by 19 July 50 juveniles were on No.4 bed. Numbers quickly drop off as autumn approaches, with most birds heading south for the winter, and a count of 53 on 3 December is high for the time of year.

Sandwich Tern

Sterna sandvicensis

Amber listed

An adult dropped into No.3 bed late morning on 15 April, joining two Black Terns already present. This is the first record of this coastal species since 2010.

Common Tern

Sterna hirundo

Amber listed

It was another great year for Common Tern records, with the first arrival noted on the reasonable date of 16 April. A flock of three were seen throughout May, peaking at four on 14 May, and are presumably birds from a local breeding site exploring the area. It is hoped the species could colonise in the coming years. Sightings tailed off as the breeding season progressed, and the last was reported on 19 August.

Arctic Tern

Sterna paradisaea

Amber listed

As is typical in such conditions, rain showers and south-easterly winds on 3 May saw an excellent movement of this species by Reserve standards, with nine passing through by 8:30am. Most birds passed straight through the Reserve, though one posed well on the scrape on No.3 bed for some time.

Black Tern

Chlidonias niger

Two were present on No.3 Bed for the morning of 15 April – the earliest ever record for the Reserve in what was a poor year nationally for this species.



Sandwich Tern (top photo), Black Terns (bottom two)

(all) Dan Owen

Cormorant

Phalacrocorax carbo

Reported in every month except May and June, with the roost in trees between Nos. 2 and 3 beds holding between 20 and 30 birds in both winter periods.

Interestingly, on 17 April one was seen flying over No.3 bed carrying nest material. Many overflying flocks were reported, including one of 21 on 8 September. Numbers appear to be increasing with the WeBS counts in November and December recording 25 and 31 respectively.

Glossy Ibis

Plegadis falcinellus

The influx into the United Kingdom in 2021 led to a first record of this species at Woolston last year and a further five sightings this year.

Two were present in front of the Morgan Hide on 6 February, returning to the scrape two days later before flying off and appearing to land south of the Ship Canal. One was back on the scrape on 9 February but was chased off by a Moorhen. On 10th two birds were present on No.3 once again but didn't stay long before flying south over the Ship Canal. On the early morning of 15 February one once more flew low over the No.3 bed scrape and like the others flew off to the south. The observer considered that it may well have roosted on the bed. Whether these birds remained in the area in subsequent weeks is not known, but two were reported over No.3 bed on 23 April.



Glossy Ibises

(clockwise) Dan Gornall, David Bowman, Dan Gornall

Spoonbill*Amber listed**Platalea leucorodia*

A rare visitor to Woolston, a permit holder reported one attempting to land on the Morgan Hide scrape on 28 May, but it flew on to the west. It may well have been the bird that had earlier flown south over Audenshaw Reservoir in Greater Manchester. This is the third record for Woolston after singles in April 1987 and May 2010.

Grey Heron*Ardea cinerea*

Recorded in every month in small numbers, the highest count being 11 on 10 September. During the breeding season birds from the heronry in Grappenhall feed daily on the Eyes and others were regularly seen flying due west, carrying nest material, suggesting another breeding site in that direction.

Great Egret*Amber listed**Ardea alba*

An occasional visitor to the Reserve with only five records during the year, four of which were in September. Apart from two on 24 September all the other sightings were of single birds.

Little Egret*Egretta garzetta*

Remains a scarce visitor to Woolston with only 18 records submitted. Of these the majority were of one or two birds, with four on the west cell of No.4 bed on 10 August the highest number reported.

Osprey*Amber listed**Pandion haliaetus*

There were just three records of this species which normally passes over the Reserve on spring and autumn passage. On 7 April one flew north at a great height over No.3 bed. Six days later a second flew north-west over No.1 bed. The only autumn sighting came on a Migration Watch on 22 October when a juvenile was seen flying west along the Canal being mobbed by corvids. It was later seen over No.3 bed. This is the latest ever record for Woolston.

Sparrowhawk*Amber listed**Accipiter nisus*

There were records of this resident species from all four beds throughout the year with the exception of June which is typical. The year began with two on No.3 bed on 6 January and on 8 February display was observed on Nos.2 and 3 beds. A pair was over No.3 bed on 3 March and on 26th two pairs were seen, one on No.3 bed and one on No.4. Three days later pairs were displaying over both No.2 and No.3 beds and one or two were reported up to 30 May. None were then seen until 10 July. On 31 July three juveniles were seen perched on No.4 bed in an area of flooded woodland and at least one juvenile was calling persistently in the same area on 16 August. A male and two juveniles were seen soaring over the north bank of No.3 bed on 23 August and a week later two juveniles were being mobbed by Kestrels over No.4

bed. Early September saw an adult female and a juvenile soaring over No.4 bed and on 28 September four were present on No.1 bed. There were further reports of one or two until early December. From the information received it would appear that a pair bred successfully on No.4 bed.

A juvenile female was ringed on No.1 bed on 1 September and two were ringed on No.3 bed, an adult male on 4 March which was re-trapped on 2 April, and a juvenile female on 22 October. Females are normally caught less frequently than males as, due to their larger size, they are more able to escape from the nets.

Marsh Harrier

Circus aeruginosus

Amber listed

More records were received for this species than any other bird of prey as interest was high following the first successful breeding on the Reserve in 2021. There were sightings through the year with up to two present during January including a male with a wing tag. In early February a second calendar-year male was regular and a female was present on 7th and again on 5 March. Towards the end of that month three were seen soaring over No.2 bed on 24th and five were in the same location on 29th. During April birds were observed from a safe distance near the nest site and up to three were seen on two dates that month. Breeding was confirmed when a male was seen taking prey to the nest on 7 May and three days later the breeding pair caught a young Coot and took it back to the nest. Two young (both males) were ringed at the nest on 18 June and towards the end of July the two fledged young were seen near the nest site. On 29 July the two adults and two young were seen flying in the vicinity of the nest. Sightings continued to the end of the year and on 6 December a male with a wing tag was seen on No.3 bed, having been ringed in Norfolk.



2cy male Marsh Harrier Dan Owen

Hen Harrier

Circus cyaneus

Red listed

There were just two sightings of this species. During a migration watch on 22 October a male was seen drifting towards Butchersfield Tip before crossing the Canal to hunt fields to the south. There was a further report on 31 October of a male over No.1 bed.

Red Kite

Milvus milvus

Never a common species at Woolston, there were just two sightings, both from No.3 bed. One was seen on 3 January, and one was observed flying west on 28 June.

Buzzard

Buteo buteo

This resident was reported throughout the year, although, surprisingly, only one November sighting was submitted and none in December. This is due to under-recording rather than an absence of birds. Only small numbers were present in January and February with a maximum of four on 25th and 26th of the latter. The six found on 4 March included a pair displaying over No.3 bed. On 14 March, 10 flew north over No.1 bed and at the end of the month and into April display was observed over Nos.2 and 3 beds. A total of 11 were soaring over No.3 bed on 14 April and on 19th a pair was seen mating on No.3 bed. Evidence of breeding occurred on 30 June when a pair was seen flying into flooded woodland on No.4 bed with the female carrying prey. On 18 August one flew into the same area, again carrying prey. No young were reported, however. The highest count of the year came on 13 September when 21 were seen soaring, the majority over No.2 bed. This represents an improvement on the previous year's maximum.

Barn Owl

Tyto alba

Barn Owls did breed on the Reserve in 2019 but unfortunately this species has not bred since and this year there were only four sightings, all on No.3 bed. There were three sightings in the first winter period, all at dawn, on 23 January, 7 February and 1 March. The only other sighting was on 27 December when one was flushed from a roost under the Morgan Hide before dawn.

In addition to the sight records a female bird, which hatched in 2021, was ringed on the north meadow of No.3 bed on 23 January.

Tawny Owl

Strix aluco

Amber listed

Tawny Owls are thought to breed on all four beds although there were no records from No.2 bed this year; probably due to the lack of coverage of this bed at dawn or dusk rather than due to the species' absence. Calling was recorded on the other three beds. Most records were of single birds but two were heard on No.3 bed on 23 January.

None were ringed this year. The nest boxes were checked at an appropriate time of year, but they were found to be empty.

Long-eared Owl

Asio otus

There were no sightings in 2022. The last confirmed breeding was in 2010 and it has only been recorded in three subsequent years – 2015, 2019 and 2020.

Kingfisher

Amber listed

Alcedo atthis

Kingfishers breed along the Ship Canal and the River Mersey although no nest holes were found this year. However, given the large number of sightings throughout the year (75 records were submitted) there must be several pairs breeding close by. They were observed on all four beds including the new wetland on No.4 bed. There were also regular sightings from the footbridge on to No.3 bed and, in the summer months, the John Morgan hide. The fence posts below the John Morgan provide excellent photo opportunities, as they are used as fishing perches on a daily basis and one observer was taken by surprise when an individual took a spider from the window of the Morgan Hide where he was sitting.

The ringing team on No.1 bed had the third best year since 1995 with 11 ringed; following the first on 4 March. None were then ringed until 24 June, when a record four were caught in the same net. The final one was caught on 9 September. All bar the first were birds of the year. One had been ringed in a previous year, an adult female originally caught on No.3 bed on 5 October 2019 and not recorded again until trapped on No1 bed on 9 February. On No.3 bed just two were ringed, both juveniles, caught on 2 July and 3 August.

Lesser Spotted Woodpecker

Red listed

Dryobates minor

Sadly, there were no sightings this year. There was only a single record in 2021 and none in 2020; the last male heard drumming was in 2019. This reflects the nationwide decline in this species.

Great Spotted Woodpecker

Dendrocopos major

Great Spotted Woodpeckers were a common site and sound on the Reserve throughout the year. Breeding Bird Surveys recorded drumming males on Nos.3 and 4 beds, and they were present in suitable breeding habitat on No.2 bed. There was no evidence from the surveys of breeding on No.1 bed and the ringing team caught none in breeding condition, suggesting that the degradation of habitat on this bed due to tipping operations may mean this species no longer breeds there. The maximum count in the year was seven on 19 March between Nos.3 and 4 Beds, including two drumming males.

On No.1 bed five were ringed (slightly less than average) between 4 March and 8 August with the first juvenile on 15 July. The three new first-year males caught in March may have been local movements. Two others were captured during the year having been ringed previously on the bed, one from 2021 and the other from 2020. None were caught in breeding condition.

Thirteen birds were ringed on No.3 bed. The average is 10.8 new birds per year. Nine birds ringed were juvenile. The first juvenile bird was ringed on 11 June. In addition, six birds were retrapped from previous years, one from 2019, one from 2020 and four from 2021.

Green Woodpecker

Picus viridis

There were no records this year. Green Woodpecker has always been an uncommon bird on the Reserve, but this is the first year since 1985 without any sightings. This probably reflects the decline in the breeding numbers in the surrounding areas of Rixton and Lymm.

Kestrel

Amber listed

Falco tinnunculus

Although there were reports from February to November, most were of singles and there was no evidence that breeding took place. This species has been in decline at Woolston in recent years, in part due to changes in habitat, and this year's records show no evidence of a recovery. Reports were submitted from all areas of the Reserve but there were no reports of more than two birds at any one time. A pair was on No.3 bed on 5 May and there were records of two on six other occasions.

Merlin

Red listed

Falco columbarius

Unusually, only one record of this winter visitor was received. On 10 December a male stooped over Butchersfield Tip and across the Canal scattering feeding thrushes and Skylarks on fields to the south.

Hobby

Falco subbuteo

This was a good year for this attractive summer visitor with 47 records submitted. Nearly all reports were from Nos.3 and 4 beds. The first was on 26 April when one was chasing Swallows on No.3 bed. Regular sightings followed, mostly of singles. On 12 May a second-summer male was on No.4 bed and an adult female on No.3 bed. A male was seen to catch a hirundine on No.3 bed on 19 July and on the same day two were hunting together on No.4 bed. August saw an adult and a second calendar year bird over No.4 bed on 4th and an adult and a juvenile over No.3 bed on 21st. The only record from No.1 bed was of one flying east on 28 August. It seems likely that breeding took place nearby although there was no evidence from the Reserve itself. At the beginning of September a juvenile was seen perched on the footbridge on a number of occasions. It seemed unconcerned by approaching humans and allowed very close approach before flying off. On 8 September an adult and two juveniles were observed hawking together on the west cell of No.4 bed. The final record was of one chasing a flock of Greenfinches on No.3 bed on 24 September.

One was caught and ringed at a Swallow roost on No.1 bed on 25 August, the first there since 2018 and only the third ever for that bed.

Peregrine

Falco peregrinus

Records were submitted throughout the year with the exception of December although there were fewer sightings from May to July. Two were on the Viaduct on 7 January and on 13th one was observed hunting over No.4 bed. There were regular reports of one or two on the Viaduct from February to April. On 19 March one flew onto the Viaduct with prey which it then ate. A first-summer was seen trying, unsuccessfully, to catch Black-headed Gulls over No.3 bed on 5 April and on 21st an adult male and an immature male were over No.3 bed. The first evidence of successful breeding came on 9 June when a male flew into a possible nest site on the Viaduct carrying prey. Two days later the male again flew in. Although the female was not seen, it was heard calling to the male from the nest site. On 30 July an adult female and a juvenile male, probably from the nest site, were hunting together over No.3 bed. A further sighting of a juvenile was on 4 August when it flushed all the wildfowl on the west cell of the new wetland area of No.4 bed. Singles continued to be reported until 12 November with sightings of a juvenile male on three dates in September and October. The evidence points to breeding having taken place on the Viaduct for the 15th successive year.



Peregrine Dan Owen

Ring-necked Parakeet

Psittacula krameri

There were three sightings this year, one on 27 August on No.4 bed and two days later possibly the same one was seen at Woolston Weir. The final record was of three flying north over No.1 bed on 22 October. The last time this species had been recorded on the Reserve was in 2004 and the only other sightings prior to that were in 1983 and 2003.

Jay

Garrulus glandarius

Jays are thought to breed in small numbers on all four beds. The maximum counts were three on No.1 bed, one on No.2 bed, seven on No.3 bed and three on No.4 bed. In some years there have been significant autumn influxes, however this year none were recorded.

On No.1 bed the ringing team had a good year, with seven ringed between 28 March and 3 October, with a further two which had been ringed in previous years, one from 2019 and one from 2021. Three females were caught in breeding condition with the first fledged young caught on 23rd September.

Only three were ringed on No.3 bed, all of which were adults. This compares with an average of 9.3 for this bed. Just one was retrapped, from 2021.

Magpie

Pica pica

Magpies are common residents on the Reserve. The Breeding Bird Surveys recorded one on No.2 bed, six on No.3 bed and nine on No.4 bed, all in suitable breeding habitat but there was no evidence of breeding on No.1 bed. The maximum count was of 17 on No.3 bed on 6 November.

One was caught on No.1 bed on 2 November, a rarely ringed species on the bed. On No.3 bed seven were ringed during the year, of which four were juveniles. The average is 3.5 newly ringed for this bed. Most of these were caught in traps set for Moorhens.

Jackdaw

Corvus monedula

Jackdaws do not breed on the Reserve but are regularly seen overflying. They were recorded in all months except for December. Maximum counts were: 60 over-flying No.4 bed on 28 June, an unusually high count for this bed, 83 flying west over No.1 bed on 14 October and circa 100 overflying the same bed on 31 October. The only non-flyover record was 85 seen in a stubble field south of Butchersfield Tip on 20 October.

Rook

Corvus frugilegus

Amber listed

There were only seven records of this species and as is typical, all but one record related to over-flying birds. The maximum count was four juveniles flying south over No.4 bed on 30 August. 45 were seen in a stubble field south of Butchersfield Tip on 20 October.

Carrion Crow

Corvus corone

Carrion Crow is a common resident and there was evidence of breeding on three beds; 19 were counted on No.2 bed on 19 April including three pairs, one was on No.3 bed on 26 May and 11 were present on No.4 bed on 5 May including a pair at a nest. The maximum counts were of flocks overflying No.1 bed in the second winter period; 35 on 14 October, approximately 100 on 2 November and the same number on 4 November.

Raven

Corvus corax

Once a scarce visitor, Ravens are now a regular sight and sound as they overfly the Reserve. Sixty records were submitted this year covering all months and all the beds. In recent years they have been known to breed in the Woolston area, local to the Reserve but it is unknown if this was the case this year. However, two juveniles on the No.4 bed wetland on 28 June and what was assumed to be a family party of six flying over No.4 bed on 4 August suggest successful breeding somewhere in the local area. All other sightings were mostly of one or two flying over.

Coal Tit

Periparus ater

Coal Tits breed in small numbers on the Reserve particularly near the footbridge onto No.3 bed and along the south bank of No.3 bed where the woodland is more mature. Two were regularly heard singing in this area in the spring period. The only other record of a singing male was on No.1 bed on 26 February.

The ringing team on No.1 bed ringed just six new birds, the lowest total since 2014; surprisingly, two of these were in February, followed by another unusual record, a breeding condition male caught on 1 June. Two juveniles were also caught in the same month, while a poor late summer/autumn passage resulted in just a single bird on 31 August. Two ringed in 2021 wintered on the bed during the first period with one of them returning, after the final capture on 2 March, in the late autumn from 24 October.

On No.3 bed five were ringed during the year. The average is 3.8 new birds, further evidence that they are becoming more common on the bed. The first juvenile was ringed on 9 July.

Willow Tit

Poecile montanus

Red listed

A decline in the breeding population of Willow Tit has been noted in the annual reports of the last two years and the 2021 Report provided an overview of the situation and the Management Plan which it is hoped will allow the species to recover its numbers. In 2022 numbers continued to remain low. The first one heard in song was on No.3 bed on 16 January and in total three males were heard singing on this bed in the spring. On No.1 bed there was only a single record of a singing bird (26 February). There were no records at all from No.2 bed.

On No.4 bed numbers were higher with at least five pairs present. Three males were heard singing, one on the Loop, one on the north bank and one on the south bank. However, sightings of family parties in the summer months suggest more breeding pairs. Three family parties were seen around the west side of the

bed and centre track and others by the viewing platform, the flooded woodland, the Sandpit Pond, and the Loop hide. In all cases the size of those family parties were small, suggesting that few young fledged. Only four nests were found in the year, details of which can be found in Allan Rustell's summary of his Willow Tit studies towards the end of this Report.

Ringling data reflects the decline of this species. On No.1 bed only seven were ringed, the lowest total since 1995, Only one was captured that had been ringed in a previous year. Just one of the juveniles ringed was re-trapped later in the year and none were caught after 15 August. On No.3 bed it was also a poor year with just 23 handlings and only eight ringed of which only seven were juveniles, compared with an average of 16. The first juvenile was ringed on 4 July, which is the latest ever date for this species. Two birds were retrapped from previous years, one each from 2020 and 2021.

Blue Tit

Cyanistes caeruleus

Blue Tit is a common resident but under recorded by observers as only eight sightings were submitted. Maximum counts were 10 on No.1 bed on 20 October, five on No.2 bed on 24 May, 14 on No.3 bed on 9 April including five in song and eight on No.4 bed on 5 May.

The ringling team on No.1 bed had the poorest year since 2013 with just 117 ringed, including 12 pulli, of which two were re-trapped after fledging. A further 97 were processed that had been ringed in previous years, the oldest from 26 August 2016, one of two from that year, others were from 2017 (7), 2018 (5) and 2019 (8) with the remainder from the previous two years. There were 11 captures that were in breeding condition, eight females and four males while the first juveniles were ringed on 8 June.

On No.3 bed a total of 210 new birds was ringed during the year compared with an average of 193. 51 were ringed in the nest boxes, just three fewer than in 2021. The first fledged young appeared on 21 May. In addition to those ringed in the nest boxes, 68 were ringed in juvenile plumage. Many of these will have come from sites near to Woolston. Retraps were from the following years: 9 from 2019, 14 from 2020 and 28 from 2021.

Great Tit

Parus major

Great Tit is a common resident but like Blue Tit, few records are submitted. Only six observations were made; 10 were on No.1 bed on 20 October, five on No.2 bed on 24 May, eight on No.3 bed on 9 April and 12 on No.4 bed on 16 April.

Similar to Blue Tit the ringling team on No.1 bed had a poor year for this species. It was the second worst year since 2013 with 90 ringed, including 16 pulli of which six were re-trapped post fledging. A further 62 were processed that had been ringed in previous years, the oldest from 22 December 2017, a further six were ringed in 2018, seven from 2019 and the remainder from the previous two years. There were 20 caught in breeding condition, nine females and 11 males, the first fledged juveniles were caught from 13 July.

On No.3 bed, 220 were ringed during the year compared with an average of 192. 98 were ringed in the nest boxes compared to 82 in 2021 and 85 in 2020. The first fledged young appeared on 21 May, which is about 10 days earlier than in the previous two years. In addition to those ringed in the boxes a further 66 were ringed in juvenile plumage. Many will have come from areas local to Woolston. Birds were retrapped from the following years: 2019 (10), 2020 (11) and 2021 (28).

Penduline Tit

Remiz pendulinus

One of the highlights of the year for the Reserve was on 12 November when a first-winter Penduline Tit was caught and ringed in *Phragmites* near to the Sybil Hogg hide on No.3 bed, almost certainly the same one which had been seen at Pennington Flash, Greater Manchester, earlier in the month. This was the first record for Woolston, and the only other Cheshire record is of one on 14 September 1986 on the Wirral at Meols. There were no further sightings on No.3 bed but the bird was subsequently relocated on the new wetland on No.4 bed on 22 November. It was seen again in the same location on the next day but there were no further sightings.

Skylark

Alauda arvensis

Red listed

Once a regular breeder on the Reserve, Skylark have returned to breed in small numbers in the last few years on No.1 bed. Sixteen were seen around the elevated pools on this bed on 26 February and on 23 April three were in song over the same area. In addition to the breeding records there were regular reports of overflying birds in both winter periods. Most observations were of one or two, with the highest counts from Migration Watches when 20 were noted on 22 October and 53 on 3 December.

Sand Martin

Riparia riparia

The first sighting of the year was on 10 March when one flew through No.3 bed. During the remainder of March small numbers continued to arrive, with a maximum daily count of eight. It was not until 12 April that significant numbers started to arrive when 31 were seen on No.4 bed. The largest count was 220 passing through No.3 bed on 16 April. They continued to arrive during the remainder of April and early May with maxima being 200 on 3 May, 135 on 5 May and 150 on 12 May.

Sand Martins breed in small numbers along the Ship Canal, but numbers appear to have declined significantly in recent years. There were no colonies found this year, although observation of the Canal banks is difficult. Two holes were discovered on the north bank of No.4 bed in the banks of the River Mersey. A pair was seen entering a nest hole on 19 May but there was no sign of any occupation on the 28 May.

The first sign of return passage was noted in late July with 28 on No.3 bed and 25 on No.4 bed on 30th. Other notable counts were 52 on 4 August, 28 on 6 August and 16 on 27 August, all on No.4 bed. The last sighting of the year was of 38 moving south over No.3 bed on 13 September.

The ringing team on No.1 bed caught just one, a juvenile on 28 July. On No.3 bed last year's large spring roost didn't materialise and just 10 were ringed on 16 April. A single bird was ringed on 18 August. The average is 23 birds per year.

Swallow

Hirundo rustica

One flying north through the new wetland on No.4 bed on 31 March was the first arrival of the year. One or two were then seen on most days in early April but it was not until 12 April that significant numbers were noted, with 23 seen on No.4 bed on that date. Similar numbers were seen during the remainder of

April, and it was not until 3 May that numbers increased when 100 were present on No.3 bed. The only other large movement was on No.4 bed during the morning of 12 May when 100 moved north-west.

In the summer months birds were seen at traditional breeding sites on the Ship Canal alongside Nos.2 and 4 beds but otherwise numbers were low in June and July. Autumn passage commenced in August, with 12 noted flying south over No.1 bed on 15th. Thereafter, in August there were regular double-digit counts peaking at 52 seen on No.4 bed during a Migration Watch. The maximum counts were in September. On 6th 135 moved south over No.3 bed and two days later 420 flew south over the same bed. The last sighting of the year was one on 8 October on No.3 bed.

After three blank years, a small roost formed on No.1 bed, between 11 August and 1 September and 20 were caught by the ringing team. All were juveniles with the exception of a single male.

On No.3 bed just four birds were ringed during the year. Two on 30 July and another two on 13 August. The average is 162 new birds, so a very poor ringing year for this species.

House Martin *Red listed*

Delichon urbicum

The first spring arrival was over No.2 bed on 17 March. This is the earliest date for the Reserve eclipsing the previous earliest record set last year on 26 March 2021. There were then no further sightings until 11 April when one was seen over No.3 bed. The next day nine were on the same bed but there were no counts above double figures until 23 April when 57 were recorded from No.3 bed. The maximum count during spring passage was of 210 on the morning of 14 May moving through No.4 bed.

In June and July numbers were low with a maximum count of 13 on No.4 bed on 12 July. Few, if any, are now thought to breed in the housing states surrounding the Reserve but there is believed to be a small colony on industrial units north of No.4 bed.

During the autumn return passage maximum counts were 20 flying south over No.2 bed on 17 August, 25 on No.4 bed on 18 August and 36 on the same bed on 27 August. The maximum count was 131 moving south over No.3 bed on the morning of 8th September and the final sighting was of 60 moving south over No.3 on 13 September.

The only ringing record was of the first to be ringed on No.1 bed since 2018, a first-year bird caught on 8 September.

Cetti's Warbler

Cettia cetti

A resident species increasing in numbers and recorded throughout the year. The highest counts of the year were combined totals for No.3 and No.4 beds with 13 on 19 March and 14 on 22 March. The highest individual bed counts were eight singing birds on No.3 bed on 9 April and 10 on No.4 bed on 19 April.

The ringing teams caught a record number of Cetti's Warbler with a combined total of 61 individuals, with 56 newly ringed, 40 on No.3 bed and 16 on No.1 bed. Five were retrapped from previous years, three from 2021, and one each from 2020 and 2019. No.3 bed had 14 juvenile birds judged to be locally fledged.



Long-tailed Tit David Bowman

Long-tailed Tit

Aegithalos caudatus

A common breeding resident recorded throughout the year. A notable count of an estimated 50 birds from several mobile flocks was recorded on No.1 bed on 20 October. Counts from No.4 bed at the start and end of the year, on 6 January and 31 December respectively, each recorded 25 birds.

A total of 199 Long-tailed Tits were caught on the Reserve, 142 ringed and 57 retrapped from the following years ringing; 2015 (1), 2016 (2), 2017 (1), 2018 (1), 2019 (15), 2020 (24), 2021 (25). The first juveniles were ringed on 21st May, roughly two weeks earlier than in 2021.

Yellow-browed Warbler

Phylloscopus inornatus

Amber listed

An uncommon visitor recorded every few years in single or low numbers during autumn passage. A single sighting was reported of vocal individual in a mobile tit flock on No.1 bed on the morning of 20 October.

The ringers on No.1 bed also caught one, a first-year bird, on 3 October. This was their first since 2016 and the sixth since 1995.

Willow Warbler

Phylloscopus trochilus

Amber listed

A common summer migrant, but declining breeding species. The first report was of a male in song on No.3 bed on 25 March. Breeding bird surveys produced the highest counts of Willow Warbler on the four beds all from April: 17 on No.3 bed on 12th, 16 on No.4 bed on 13th, five on No.2 bed on 16th and 10 on No.1 bed on 23rd. The last sighting was of one on No.3 bed on 13 September.

A total of 124 Willow Warblers was ringed on the Reserve, with just two retrapped from previous years, both from 2021. The No.1 bed total of 84 ringed was the second lowest since 1995, whereas the No.3 bed total of 40 ringed was close to average. The first returning bird ringed was on 8 April, the first juvenile on 24 June and the last was ringed on 13 September. On No.3 bed 10 of the 40 ringed were in wholly juvenile plumage and probably locally fledged, whilst on No.1 bed 12 were caught in breeding condition, eight females and four males.

Common Chiffchaff

Phylloscopus collybita

A common summer migrant and breeding species with an increasing number now staying throughout the year. There were six sightings of Chiffchaff in February, between 7th and 26th, involving at least three individuals, two on No.3 bed and one on No.1 bed. Nine days later on 7 March one in song at the western end of the Reserve was followed by three singing at the eastern end on 9th. By the end of March maximum counts from the breeding bird surveys were reporting typical numbers of singing males, with 30+ on Nos.2 and 3 beds and 50+ on No.4 bed and a Reserve total in excess of 150. October saw the sightings drop to mainly single birds and three records in December were again evidence of an overwintering strategy.

It was a phenomenal year for the ringing teams, with 913 ringed and 32 retrapped from previous years. This total represents an increase of 29% and 25% on the previous record numbers ringed on No.1 and No.3 beds respectively. Of the 32 recaptured birds, the oldest was ringed in 2018 with one in 2019 and the remainder in 2020 and 2021. Excluding an overwintering individual ringed on 11 February the first returning migrants were two ringed on 14 March. The first fledged juvenile was ringed on 6 June and 266 juveniles ringed on No.3 bed were judged to be locally fledged. No.1 bed reported 43 adults captured in breeding condition, 29 males and 14 females. The last ringed Chiffchaffs of the year, possibly overwintering, were trapped on 27 and 30 November on No.3 and No.1 beds respectively.

'Siberian Chiffchaff'

Phylloscopus c. tristis

For the third consecutive year, records were received of this distinct eastern subspecies (including birds not heard to call, but which matched the expected appearance of *tristis* based on individuals confirmed by DNA analysis). The reserve's second ever spring record came on 4 April, when one was observed briefly on No.4 bed, and despite not calling, the bird was in active body moult, confirming identification. More typical autumn records came on 19 November, when one was trapped and ringed on No.3 bed, this bird is believed to be responsible for records of a vocal individual in a similar area of No.3 bed on 6 and 8 December, though a metal ring wasn't proven either way. A vocal bird was also present in the east cell of No.4 bed on 22 November.



Siberian Chiffchaff Dan Owen

Sedge Warbler

Amber listed

Acrocephalus schoenobaenus

A breeding summer migrant, the first returning individual was reported on 13 April. There were 14 records submitted over the year, typically these related to single or low digit numbers with the highest counts of three in song on No.4 bed on 21 May and a family party of five on 16 July. The last sighting was of one on 13 August.

In total, 114 Sedge Warblers were ringed on the Reserve but with widely varying outcomes for the two ringing sites. No.1 bed had a very poor year with just 12 ringed, while No.3 bed delivered an above average total of 102. The first Sedge Warbler was ringed on 30 April, the first juvenile on 15 July and the final one ringed on 10 September. Just one was retrapped, originally ringed in 2019, and a French ringed bird returned for a second year.

Reed Warbler

Acrocephalus scirpaceus

A common breeding summer migrant. Sixteen records of Reed Warbler were submitted over the year, the first returning bird was recorded on 12 April, in song on No.3 bed. Sightings remained in low single digits until the highest count of the year reached 34, all in song, on No.3 bed on 26 May. The last sighting was of one on No.3 bed on 8 September.

A total of 548 Reed Warblers were caught during the year, 512 ringed and 36 retrapped from previous years, the oldest of the latter from 14 August 2016. The first returning bird was ringed on 15 April, a typical date, the first juvenile on 24 June and the last of the year on 24 September. Analysis of the ringing data identified that 222 of the 324 Reed Warbler ringed on No.3 bed were in juvenile plumage and/or undergoing post juvenile moult and were probably locally bred and 37 of the 188 ringed on No.1 bed were caught in breeding condition, 23 females and 14 males.

Grasshopper Warbler

Red listed

Locustella naevia

Disappointingly there were no sightings or singing Grasshopper Warblers reported on the Reserve this year.

Two were ringed, a juvenile on No.1 bed on 11 July and another on No.3 bed on 28 July.

Blackcap

Sylvia atricapilla

A common breeding summer migrant. The first report of a returning Blackcap was of two in song on 23 March on No.4 bed. Numbers increased through the remainder of March and early April when higher counts were recorded; 32 on No.3 bed and 31 on No.4 bed on 12 April, 10+ on No.1 bed on 15 April and 24 on No.2 bed on 16 April. The highest count of the year was of 50 on No.4 bed on 19 April. The last sighting of a single male was reported on the early date of 8 September.

The number of Blackcaps ringed this year was the second highest ever total on No.3 bed and the sixth highest over the last 27 years on No.1 bed. A total of 695 was caught, 686 ringed and nine retrapped from previous years. All the retraps were ringed over the last two years, 2021 and 2020. The first returning bird was ringed on 24 March, the second earliest date on record for No.3 bed, the first juvenile on 4 June and

the last of the season was ringed on 2 October on No.3 bed. One trapped on 9 December on No.1 bed was likely overwintering. The ringing data showed that 32 of the 274 ringed on No.1 bed were caught in breeding condition, 10 females and 22 males and that of the 240 juveniles ringed on No.3 bed 80 were ringed before the end of July indicating locally bred birds.

Garden Warbler

Sylvia borin

Uncommon breeding summer migrant. There were six records of Garden Warbler, from No.1, No.2 and No.4 beds. All related to singles except for reports of two on No.2 bed on 30 April and another two birds on No.4 bed on 6 May. The first record was on 26 April on No.2 bed and the last, again on No.2 bed, on 24 May.

There were 29 ringed on the Reserve, 15 on No.3 bed and 14 on No.1 bed. Just three were adults, with none in breeding condition and the remaining 26 were juveniles. The first, an adult bird was ringed on No.3 bed on 30 April and the last, another adult, on 25 August on No.1 bed. The juveniles were ringed from late July to late August which is fairly typical for the species.

Lesser Whitethroat

Sylvia curruca

An uncommon breeding summer migrant. Seven records were submitted between the 26 April and 5 July. Two singing males were noted either side of the No.4 bed Loop on 2 May and again on 3 June, with two more noted in song on No.1 bed.

Three Lesser Whitethroats were ringed this year. After two blank years, No.3 bed ringed one on 20 August and a typical two were ringed on No.1 bed, both juveniles, one on 13th July which could have been locally bred and the second on 4 August.

Whitethroat

Sylvia communis

Amber listed

A common breeding summer migrant across the Reserve. The first returning migrants were reported on 14 April when three males were in song on No.3 bed. The highest numbers were recorded on the Breeding Bird Surveys on No.4 bed, with 12 on 19 April and 22 on 5 May. The final record of the year was of three on No.4 bed on 9 September.

93 Whitethroat, an average number, were caught by the ringers, with 88 ringed and five retrapped from previous years, three from 2021 and two from 2020. The first capture of the year was the earliest on record for No.3 bed on 13 April, the first juvenile was ringed on 11 June and No.3 bed had 49 ringed in wholly juvenile plumage, indicating they were locally fledged. The last of the year was ringed on 2 September on No.1 bed.

Firecrest

Regulus ignicapilla

A rare visitor to the Reserve. There was just one sighting of a Firecrest, on 11 October, which was moving around No.3 bed with a flock of Long-tailed Tits.

Goldcrest

Regulus regulus

A common visitor to the Reserve. Twenty-five records of Goldcrest were submitted over the year. The first on 6 January when two were on No.3 bed. Three were reported in song, two on 16 April on No.2 bed and one on 23 April on No. 3 bed. All the records were of single-figure counts. except on 18 October when 10 were counted on No.3 bed and on 20 October when 12 were on No.1 bed. There were no reports during the period 24 April to 5 September.

The ringing data suggests that Goldcrests had a 'good year' with the second and third highest totals ringed on No.3 and No.1 beds respectively. In total 360 were ringed and two retrapped from previous years. Only three were ringed in the first quarter and the first juvenile was ringed on 1 June, with 51 juveniles likely to have fledged locally. The majority of Goldcrests are traditionally caught during autumn passage, which peaks in October and November, and they generally move through the Reserve very quickly. This year, though, five were retrapped in December and were probably overwintering.

Wren

Troglodytes troglodytes

Amber listed

A common resident breeding species, which is often overlooked and under-reported, with just 13 records received. As a result, the highest counts are usually associated with the Breeding Bird Surveys conducted in the spring. This year, 16 were recorded on No.1 bed on 23 April, 16 on No.4 bed on 5 May, 32 on No.3 bed on 24 May, and 24 on No.3 bed on 26 May.

A total of 214 was ringed, with 17 also retrapped. The oldest recapture was originally ringed on 26 July 2017, one was from 2018, one from 2019 and the remainder from the previous two years. The 214 ringed comprised the second highest total on No.3 bed and the highest total since 2005 on No.1 bed. The first juvenile was ringed on 15 June and the ringing data analysis showed that 12 were caught in breeding condition on No.1 bed, six females and six males and that 77 ringed on No.3 bed were caught in wholly juvenile plumage, suggesting local fledging.

Nuthatch

Sitta europaea

A species increasingly encountered on the Reserve. Nuthatches were recorded in every month of the year except July. All 25 sightings were from No.3 bed and 22 related to singles with the remaining three records of two.

Three Nuthatch were ringed. A male on No.1 bed, which was the 15th record for the bed since 1995 and two on No.3 bed where it is now featuring regularly in their ringing records.

Treecreeper

Certhia familiaris

An unobtrusive species but regularly recorded throughout the year. Reports usually relate to single or small numbers. Of the five records submitted four were of singles with the exception of the 13 April, on No.4 bed, when two were present in wet woodland.

21 Treecreepers were ringed during the year and one was recaptured with an original ringing date of 18 June 2021. This was a better than average year for the species and two males were caught in breeding condition on No.1 bed and nine of the 11 ringed on No.3 bed were juvenile birds. The ringing numbers better reflect the number of Treecreepers using the Reserve compared to the visible or audible records.

Starling

Red listed

Sturnus vulgaris

A locally resident breeding species, most often recorded overflying the Reserve and when forming or leaving roosts in the reedbeds. The highest counts of the year related to such events with 50 leaving a roost on No.3 bed on 5 March, 130 reported on power lines to the north west of No.4 bed on 6 August, 300 flying south over No.1 bed with a further 250 feeding in neighbouring fields on 20 October and 700 overflying during a migration watch on No.1 bed on 22 October.

Blackbird

Turdus merula

A common resident breeding species on the Reserve. The high counts for the individual beds were 25 on No.3 bed on 1 March, 13 on No.2 bed on 16 April, 25 on No.4 bed on 19 April and 25 on No.1 bed on 20 October. A walk around the whole Reserve on 10 December recorded 80 birds.

It was a below average year for this species with regard to numbers caught by the ringing teams. The combined total ringed was 51 with a further 21 recaptured from previous years. The oldest retrap was originally ringed on 3 October 2016. The first juvenile was ringed on 15 June and nine of the 26 ringed on No.3 bed were in wholly juvenile plumage suggesting localised fledging. Eighteen of the 42 caught on No.1 bed were in breeding condition, six females and 12 males.

Fieldfare

Red listed

Turdus pilaris

A common winter visitor to the Reserve. Numbers in the first quarter of the year fluctuated with one on 18 January, 240 filtering west across No.4 bed over the morning of 7 February and 13 on 17 March, the last record of the winter. The highest counts occur when the large movements of the early autumn passage arrive. This is reflected in the counts of southerly movement overflying No.1 bed in October with 154 on 19th (the first record of the autumn), 1,583 on 20th and 2,110 on 22nd during the morning's Migration Watch. Counts dropped to no more than double-figures throughout December.

Ring Ouzel

Red listed

Turdus torquatus

There was just a single record of this scarce passage migrant, on 20 October on No.1 bed. of a bird flying low heading south with two Redwing at 8:41 am. This is the eighth record for the reserve.

Redwing

Red listed

Turdus iliacus

A common winter visitor. Typically, the numbers recorded in the first quarter are generally in single and low double digits. The highest counts were of 45 on 18 January on No.1 bed, 30 on the same date on No.3 bed and 40 on No.3 bed on 5 April, which was also the last record of the first winter period.

The first returning autumn Redwings were recorded on 30 September, with seven flying south over No.1 bed. Numbers remained low until mid-October when 55 were reported on No.3 bed on 15th. Over four days on No.1 bed counts of birds flying south were reported of: 1,500+ on 19, 5,884 between 07:45 and 10:45am on 20th and 2,165 during a morning migration watch on 22nd. By November numbers reported had dropped significantly, with 60 on 15 December the highest count.

10 were ringed in the first quarter of the year, five each on No.1 and No.3 beds, with the last ringed a day apart on 25 and 26 March. The first returning autumn migrant was ringed on 3 October on No.1 bed. A further 85 were then ringed until the end of the year with No.1 bed contributing just 15 of that number, a low outcome in comparison to recent years.

Song Thrush

Amber listed

Turdus philomelos

A common breeding resident. Never reported in large numbers the majority of records are of single figure counts outside of the breeding season. The highest counts during Breeding Bird Surveys were: 13 on No.4 bed on 19 April, 10 on No.2 bed on 24 May and nine on No.3 bed on 26 May. Reserve wide counts reported 12 on 23 February and 10 on 13 April. The highest count was of 14 when five were flushed along the Canal track and nine were around No.1 bed on 20 October.

A slightly less than average year with 38 Song Thrush caught by the ringing teams. Thirty-one were ringed and seven recaptured from previous years, the oldest ringed of these from 6 November 2019. The first juvenile was ringed on 13 July and only six on No.3 bed were in wholly juvenile plumage suggesting locally fledged. No.1 bed recorded nine males in breeding condition and the four caught on 14 October may have been arriving migrants.

Mistle Thrush

Red listed

Turdus viscivorus

Locally resident, an uncommon but regularly recorded species on the Reserve. There were 10 records over the year, seven singles, one of which was in song on No.4 bed on 3 January. There were then three records of two, on No.1 bed on 23 February and 12 October and on No.4 bed on 8 November.

Robin

Erithacus rubecula

A common breeding resident. The significant records for the year were Reserve wide counts of 56 on 8 February and 66 on 15 March, Breeding Bird Survey counts of 24 on No.3 bed on 9 April, 27 on No.2 bed on 16 April, 57 on No.4 bed on 19 April and nine on No.1 bed on 23 April. A walk around No.1 bed reported a higher count of 20 on 20 October.

A combined total of 157 Robins was ringed on the Reserve and 51 were recaptured from previous years, the oldest from 15 June 2016. The first juvenile was ringed on 21 May and No.3 bed reported that 31 were in wholly juvenile plumage suggesting local fledging. Seventeen were captured in breeding condition on No.1 bed, four females and 13 males which was exactly the same number as in 2021.

Redstart

Phoenicurus phoenicurus

Amber listed

An uncommon summer migrant recorded in most years. There were no sightings reported in 2022.

Three Redstart were ringed on No.1 bed, the best total since 2002. The first was an unusual spring record of an adult male on 18 April followed by two first-winter birds ringed over the more typical late summer period with one on 25 August and one on 8 September.

Whinchat

Saxicola rubetra

Red listed

An uncommon summer migrant irregularly recorded on the Reserve during spring and autumn passage.

Whilst there were no reported sightings of Whinchat on the Reserve a single adult male Whinchat was caught and ringed on No.1 bed on 18 April, the second chat of the day after the earlier Redstart.

Stonechat

Saxicola rubicola

An uncommon but annual visitor during spring and autumn movement. There were three records of Stonechat on the Reserve, all during the autumn and all from No.4 bed. The first on 25 October was of two birds followed by a single male on 22 November and then three birds on 26 November.

A single female was ringed on No.3 bed on 24 September, only the second Stonechat to be ringed on the bed it was also caught in the same *Phragmites* net as the first bird.

Wheatear

Oenanthe Oenanthe

Amber listed

An uncommon summer migrant but recorded annually in spring or autumn passage. There were 11 records submitted this year, all in spring, all from No.4 bed and all between the dates of 24 March to 19 May. All but one of the records related to single males and females. The exception was a record of five males reported on 12 April with one of these showing characteristics of the Greenland race, *Oenanthe o. leucorhoa*.

On 12 May on No.4 bed a single male Greenland Wheatear was reported from the east cell of No.4 bed.

House Sparrow

Red listed

Passer domesticus

A common breeding resident of the urban surrounds of the Reserve. Numbers and records are higher in areas closer to the nearby urbanisation such as the Canal Track, Weir basin and the western and southern parts of No.4 bed. Of the 18 records, 10 were associated with or adjacent to the Canal Track with the highest count of 25 around the entrance to No.4 bed on 7 August and 20 were also reported around the Weir on 2 February. Records submitted inside the Reserve included one on 14 May on the west cell of No.4 bed, three on the Morgan Hide feeders on No.3 bed on 30 July and one on No.1 bed on 3 August, the first for a number of years.

Dunnock

Amber listed

Prunella modularis

A common resident breeding species. Most records relate to low single figure counts as this species skulking nature probably results in under reporting. The higher counts occur during Breeding Bird Surveys when the males are vocal and visible. Five were reported from No.3 bed on 9 April and 26 May, 14 on No.2 bed on 16 April nine of which were singing and five in suitable habitat and 21 from No.4 bed on 19 April with 17 of those in song and four in suitable habitat. Eight were also recorded on No.1 bed on 20 October.

A combined total of 111 were ringed, which is slightly above average, with a further 27 retraps, the oldest of these was originally ringed in 2019. The first juvenile was ringed on 1 June and on No.3 bed 45 of the 84 Dunnock ringed were in wholly juvenile plumage indicating locally fledged birds. On No.1 bed 10 of the 34 captured were in breeding condition, three females and seven males.

Yellow Wagtail

Red listed

Motacilla flava

This declining wagtail is a passage migrant which breeds in small numbers on the farmland which surrounds much of the eastern end of the Reserve. They bred regularly in the very early days of the Reserve but were lost as a breeding species due to habitat change and the rapid national decline from the late 1960s onward. The creation of a large new wetland on No.4 bed has contributed to a resurgence for the species, with an encouraging 22 sightings this year. Of the nine records between 13 April and 15 May, most were of one or two overflying Nos.3 and 4 beds. The exceptions came when one was observed feeding in the seed crop on No.3 bed on 13 April, while five flew south over No.4 bed on 30 April.

Two which were along the River Mersey by No.2 bed on 7 June were probably from the local breeding population.

Return passage produced a further twelve sightings, between 2 July and 8 September, all but one of which came from No.4 bed, with two on No.1 bed on 20 August being the exception. While the majority of the No.4 bed records were of flyovers, with a maximum count of five heading south on 3 September, the open and insect rich habitat on the new wetland enticed a few to stop and feed. One was on the West Cell on 2 July, with eight there on 4 August and four again on 6th.

Grey Wagtail

Amber listed

Motacilla cinerea

Grey Wagtails are residents which can be encountered across all four beds throughout the year, with one or two pairs usually breeding and a light autumn passage regularly noted. The highest count from the first half of the year was four on No.4 bed on 8 March. One pair was proved to breed, with the adults feeding two young below the No.3 bed footbridge on three dates between 7 and 26 June. Autumn passage was noted on many dates, usually involving just one or two, with maxima of five south over No.4 bed on 27 August, nine over the same bed on 8 September and five heading south over No.1 bed on 20 October.

The 24 ringed during the year was the best total since 2017. On No.1 bed it was the equal second-best year since 1995 with 18 ringed. All were birds of the year and mainly caught from 19 August-21 September with a very late one on 9 December. In contrast, just six were ringed on No.3 bed, all from the autumn passage period, between 6 August and 10 September.

Pied Wagtail

Motacilla alba

This species, our commonest wagtail, is both a resident and a passage migrant, which breeds in small numbers and can sometimes form sizeable winter roosts. Careful searching in spring can usually locate a few of the nominate race *alba*, or White Wagtail, which winters in West Africa and breeds in Iceland. Sightings of Pied Wagtail were received from all four beds, with the highest count, from the first half of the year, of five from No.4 bed on 8 March. With the No.4 bed wetland proving attractive to all three species of wagtail, it was no surprise to see White Wagtails feeding there on five dates between 12th and 19 April, with a maximum of four on 18th. There was no confirmation of breeding this year. Return passage was first noted on 9 July when nine dropped in to feed on the No.4 bed wetland. Other notable counts included 10 flying south over No.4 bed on 27 August and 11 also south, over No.1 bed on 20 October. No winter roosts formed this year.

For the second year running, a first-year Pied Wagtail was caught on No.1 Bed, which is Woolston's fourth record in the last twenty years and only the ninth to be ringed on the bed since 1995.

Meadow Pipit

Amber listed

Anthus pratensis

Although Meadow Pipits occasionally bred on the Reserve, decades ago, in recent years they have been primarily a passage migrant, with a few wintering. This status is starting to change due to the creation of much more open, seed and insect-rich habitat on both Nos.1 and 4 beds. Small feeding flocks are now a regular occurrence, and it is tempting to think that we might soon have them back on the breeding list. For example, 15 were feeding on the West Cell of the No.4 bed wetland on 29 January, with a similar number around one of the small pools on No.1 bed on 2 February. There were then no sightings from 11 April-10 June, when four turned up on No.1 bed. Thirty-one feeding on the No.4 bed wetland on 8 September was a notable sign of return passage, with maxima from the rest of the autumn including: 32 over No.3 bed on 13 September, 50 south over No.1 bed on 21 September and again on 3 October, with 37 over the same bed on 20th. Twenty were feeding on the No.4 bed wetland on 22 November, while the 46 recorded flying over No.1 bed during the Migration Watch on 3 December, were probably a local feeding movement. The year finished with the unusual sight of two landing to feed on the Morgan Hide scrape during an unusually harsh spell of weather.

The relatively low numbers recorded on return passage were reflected in the ringing totals and the 24 ringed was the lowest since 2012. On No.1 bed it was the quietest year since 2013 with just 19 ringed, five of those between 14 and 25 March, the remainder being caught between 9 and 23 September. It was a more typical year on No.3 bed, where five were ringed between 2 September and 8 October.

Tree Pipit

Anthus trivialis

Red Listed

This declining, migratory pipit usually passes through in very small numbers in autumn, so the 10 records this year was unprecedented. One, which flew south over the No.4 bed wetland on the very early date of 16 June was a sign of things to come. All but one of the remaining counts came from August, which is usually the peak month. These included: one over No.4 bed on 4th, two over the same bed on 9th, another single over No.1 bed on 20th, three south over No.4 bed on 23rd, a remarkable 12 south on 25th (two on No.4 bed and 10 on No.3 bed), finishing with singles over No.4 bed on 27th and 30th. Finally, one flew south over No.4 bed on 8 September.

From a ringing perspective, it was a quiet year on No.1 bed, with just one caught, a first year on 26 August. The notable autumn movement over the west end of the Reserve was reflected on No.3 bed, where three were ringed on 6, 13 and 25 August - a record for the bed.

Water Pipit

Anthus spinoletta

Amber listed

Water Pipits used to winter regularly around the West Pool on No.1 bed, with the last record from the year 2000. It was a pleasant surprise when one in summer plumage was located on the southern end of the new wetland on No.4 bed, on 15 April, moving between the east and west cells before finally flying off to the south-east.

Rock Pipit

Anthus petrosus

As with the previous species, it is a long time since we've recorded this large, stocky, mainly coastal pipit, with the last record in 1991. The Elevated Platform on the No.4 bed wetland has proved a particularly good place to record visible migration when the winds are right, though a single Rock Pipit, which flew low over the platform, calling actively on 25 October, was a real surprise.

Chaffinch

Fringilla coelebs

This familiar finch is one of the UK's most numerous species, though the last decade has seen a sharp fall in numbers linked to the spread of the disease Trichomonosis, which is thought to be transmitted via unhygienic garden feeders and bird baths. Most of the year's maxima usually come from No.3 bed, where Chaffinches take advantage of the ground-feeding available in the seed crop or at the various feeding stations. Seventy were present on No.3 bed on 6 January, reducing to 30 by 26 March.

During the annual Breeding Bird Survey eight males were in song, four on No.2 bed, three on No.3 bed and one on No.4 bed. Autumn sees a large influx to the UK from Fenno-Scandia, with southward movements often observed, as well as the usual build-up of feeding flocks. On 15 October, 80 flew south

over No.3 bed, with 49 heading south over the same bed in three hours on 20th. During the Migration Watch from No.1 bed on 22 October, 98 also flew south. Feeding flocks included 80 on the No.4 bed wetland on 25 October, while the No.3 bed flock rose from 50 on 8 November to 150 by 15 December, reducing to 80 by 27th.

The impact of Trichomonosis on the Chaffinch population, possibly allied to the impact of global warming on migration from Fenno-Scandia, can be most easily seen in the ringing totals, with the 176 ringed the lowest since 2004. For No.1 bed it was an average year with 96 ringed and a further 14 processed from previous years. The oldest of these was from 11 December 2017, with two others from 2018 and the remainder from the previous two years. Only one, a male, was caught in breeding condition while the first juvenile was ringed on 6 July. On No.3 bed just 80 were ringed compared with an average of 175. The last one of the first winter period was ringed on 8 April and none was ringed during the breeding season, the first time this has ever occurred. The first one of the autumn was ringed on 22 October, with 51 ringed between then and the year end. The ringing team regularly commented that this species was conspicuous by its absence for a prolonged period of the year.

Brambling

Fringilla montifringilla

This colourful finch breeds in Fenno-Scandia and migrates in varying numbers, depending on the availability of beech mast and the harshness of the weather on its breeding grounds. This year we were treated to our best-ever influx, with the first winter period as dramatic as the last winter period was poor, with most counts coming from No.3 bed. The year opened with 30 on No.3 bed on 3 January, rising rapidly to 150 by 25th. Circumstances in February permitted some very accurate counting to take place, as the Brambling flock roosted in No.2 bed and could be watched flying over the Morgan Hide and onto No.3 bed in small groups after dawn. Maxima were: 400 on 12th, 420 on 15th, 440 on 22nd and 450 on 24th. March produced four counts in excess of 150 on No.3 bed, with small numbers also arriving to feed in Alders around the Loop of No.4 bed. April opened with 225 still present on No.3 bed on 2nd, with 125 feeding around the Loop of No.4 bed on the same date. 14 April's 150 on No.3 bed was the last three-figure count of the spring, with numbers then dropping to around 60 by the last week of the month. As ever, when Bramblings stay in numbers into the spring, we get a chance to hear some males in song, though 19 March was exceptional, with 15 in song on No.3 bed and another five on No.4 bed. The last spring sighting was of one on No.3 bed on 30 April. There were just nine records from the second half of the year, with seven south over No.1 bed on 20 October and then just low single-figure counts, finishing with of five on No.3 bed on Christmas Eve.

Ringing numbers during the first winter period also reflected this phenomenal "Brambling Winter" with 585 ringed, which is more than double the previous highest total of 251 in 2018. Although few counts of note were received from No.1 bed, it was a record year for the species with 143 ringed. The previous highest annual total was 121 in 2018. A further 25 were captured that had been processed on No.3 bed before moving to No.1. The first for the year was on 5 January with the final one of the spring on 20 April. None was caught later in the year. Of all the birds captured, 59 were female (47 hatched in 2021) and 109 were male (85 hatched in 2021). As might be expected, the No.3 bed team also experienced a record year, with an unprecedented 442 ringed between the start of the year and 26 April, compared with an average of 55.

Bullfinch

Amber listed

Pyrrhula pyrrhula

Bullfinches are resident breeders, with numbers supplemented by an autumn influx due to the rich feeding which the Reserve provides. Maxima from the first quarter of the year were: 10 on No.3 bed on 6 January, 20 mainly around the centre copse of No.3 bed on 20th, 12 on the same bed on 26 March and 33 around the perimeter of No.4 bed on 19 April. There was no evidence of breeding, which is not surprising, given the shy nature of a species which is easily overlooked. There was just one double-figure count from the post-breeding period, with 10 on No.3 bed on 15 December.

Woolston has long been a stronghold for this species, though a steady decline has been noted and the 102 ringed is the lowest number since 2008 and a further reduction from the 136 in 2021. Although the loss of scrub habitat across the Reserve may be a contributing factor, we may also be experiencing what is a slow decline on a national scale. On No.1 bed it was the worst year since 2002 with just 22 ringed. A further eight were captured from earlier years, three from 2019 and the remainder from the previous two years. 10 were caught in breeding condition, four females and six males and the first juveniles were ringed on 15 June. It was also a poor year on No.3 bed, with just 80 ringed. The average is 117 and this is the lowest total since the 93 in 2013, 200 fewer than the year peak. The first juvenile was ringed on 20 June, quite a late date. 45 were ringed in juvenile plumage and therefore probably locally bred. Two were retrapped from 2019, 8 from 2020 and 21 from 2021.

Greenfinch

Red Listed

Chloris chloris

As with Chaffinch, this species has been hit hard by the spread of Trichomonosis, due to visiting unhygienic garden feeders and bird baths. Although the Reserve still holds good numbers of this breeding resident, compared with most of the surrounding countryside, a significant decline is still evident. Up to 120 were present around the feeding stations and seed crop on No.3 bed until 13 January, reducing to 80 by 11 February, 60 by the 15th, and 30 by 26 March. The annual Breeding Bird Survey found a healthy 14 males in song, six on No.2 bed, three on No.3 bed and five on No.4 bed. No large feeding flocks formed in the autumn/winter periods, with the highest counts from No.3 bed of 40 on four dates between mid-August and early November, followed by 50 on 8 November, 80 on 15 December and 40 on 27 December.

Although a long way below past numbers the 374 Greenfinches ringed in 2022 is a modest improvement on the 302 from 2021. On No.1 bed, though, it was a very poor year, the second worst on record with only 90 ringed. Amazingly, there were no retraps at all during the year. Just three were caught in breeding plumage, two females and a male and the first juveniles were not ringed until the late date of 27 July. The picture was different on No.3 bed, with an improvement on the previous year's total of 191, with 284 ringed. The average is 339. The first juvenile was caught on 4 July, which is a late date.

One-hundred and fifty-two birds were ringed in juvenile plumage and therefore probably locally bred. Just 7 were retrapped, from 2020 (1) and 2021 (6).

Linnet
Red listed

Linaria cannabina

Linnets are an open country resident which breed in small numbers, wherever stands of Gorse are found, and which is suffering a steady national decline. The seed-rich expanses of the No.4 bed wetland and the worked areas of No.1 bed prove most attractive to the small post-breeding flocks which form. Fifty were on No.4 bed on 3 January, with 30 there on two subsequent dates in January, while 60 on No.1 bed on 26 February was the highest count from the opening quarter of the year. The only evidence of possible breeding came from the annual Breeding Bird Survey, with three in song on No.2 bed and one singing male and two pairs in suitable habitat on No.4 bed. Maxima from the autumn/winter periods included: 40 on No.4 bed on 4 August, 80 on the same bed on 6 October, 40 on No.1 bed on 20 October, 45 on No.3 bed on 15 December. and 30 on No.4 bed on 25 December.

Due to its preference for wide open spaces, this species does not often turn up in the ringers' nets, so the four ringed was an average number. On No.1 bed, just one was caught, an adult male in breeding condition on 20 April. For No.3 bed, the three ringed were all trapped on 12 November and was an average total.

Lesser Redpoll
Red listed

Acanthis cabaret

This tiny, agile finch, which once bred on the Reserve, is now a passage migrant and winter visitor and is another of our seed-eaters which is experiencing a notable decline. Just two double-figure counts were submitted from the opening of the year to mid-April, with 10 on No.3 bed on 18 January and 10 between Nos.3 and 4 bed on 15 March. There were no breeding season records. Counts from the second half of the year were also low, with maxima of 10 on 19 October, eight on 20th and nine on 22nd, all from No.1 bed.

In contrast to the sight records, it was a decent year for the ringers, with the total of 109 ringed well above the 10-year average of 77. For No.1 bed an average total of 49 was caught, including two not assigned to subspecies. The 16 captures in the first part of the year were all in March, the first on 4th and the last on 30th. There were no further captures until 19 September, with the final one of the year on 14 November. On No.3 bed it was a record year with 60 ringed, 10 of which were ringed between 9 and 26 March. The first one of the autumn was caught on 13 September, while nine were ringed in October, 37 in November and 7 in December. The yearly average is 31.

Common Crossbill

Loxia curvirostra

This colourful denizen of pine forests is an irruptive species which is less than annual on the Reserve. Typically, there was just one sighting, when three were reported flying over the Morgan Hide on 24 December.

Goldfinch

Carduelis carduelis

Goldfinches are resident breeders, can be encountered across all four beds and form sizeable postbreeding flocks. The only notable flock from early in the year was around 40 feeding in the No.3 bed seed crop on several dates in mid-January. Breeding was suggested by males in song located during the annual Breeding Bird Survey, with three on No.2 bed and one on No.3 bed. The numbers present during the second half of

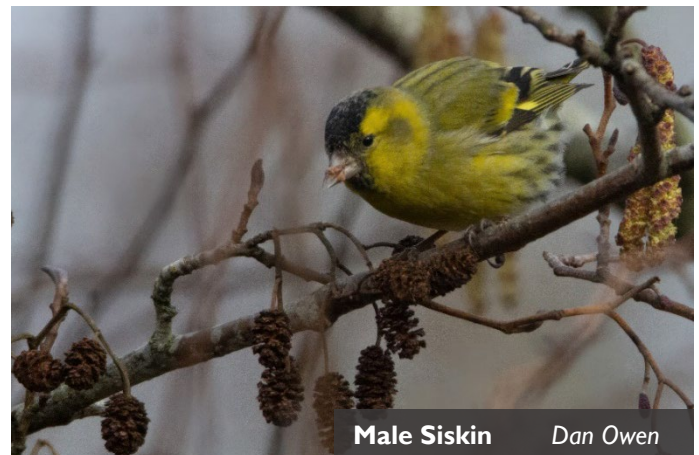
the year seem to indicate a successful breeding season for the species. The very seed-rich margins of the new wetland on No.4 bed were particularly productive, with all the year's maxima coming from there. Twenty on 7 July had grown to 120 by 28th, 160 by 6 August and peaked at 200 by 18th. The first week in September saw a flock of about 150 regularly feeding around the No.4 bed wetland margins before the attention of aerial predators started to break up the flock. As well as the usual Sparrowhawks and Kestrels the availability of potential prey drew the attention of several Hobbies, with one observed attempting to catch one from a flock of 50 on 24 September. Thereafter, only small numbers were present through to year end. The only counts of note away from No.4 bed were: 35 on No.1 bed on 20 August, 20 on the same bed on 20 October, 50 on No.3 bed on 10 December, with 70 there on 15th.

Fifty were ringed compared with a 10-year average of 33, which represents a good year if the two exceptional 'thistle years' are discounted. On No.1 bed it was an average year with 14 ringed, including two in breeding condition, one female and one male. The first juvenile was caught on 18 July. For the No.3 bed team 36 were ringed during the year, compared with an average of 15. Five were ringed in juvenile plumage and one was retrapped from 2019.

Siskin

Spinus spinus

Siskins are a passage migrant and winter visitor, with small flocks occasionally visiting some of the many stands of Alder. The highest counts from the first winter period were: 20 at Bollin Point on 10 January, 13 on No.1 bed on 18 January, with five on No.3 bed on the same date, and 25 moving along the south bank of No.3 bed on 11 February. The final sighting of the spring came with one over-flying No.3 bed on 23 April. Return passage started with one over No.3 bed on 2 July and maxima from the remainder of the year were: 27 south over No.1 bed in three hours on 20 October, the same number south over No.1 bed during the Migration Watch on 22 October, 10 over-flying No.4 bed on 25 October and 20 at Bollin Point on 2nd December.



Male Siskin

Dan Owen

Two were ringed during the year, an adult male on 9 December on No.1 bed and more unusually, a male on No.3 bed on 12 March.

Yellowhammer

Emberiza citrinella

Red listed

This attractive, declining bunting breeds in small numbers adjacent to the eastern end of the Reserve and is a scarce visitor, usually to No.1 bed or to Butchersfield Tip. This year there were a typical five sightings, with one on No.1 bed on 23 February, two on the same bed on 30 March and two on 20 October, one of which was on No.1 bed and the other near Rixton Bridge. The Migration Watch on 22 October produced the year's maximum count, when three dropped in to drink at one of the small pools on the north side of No.1 bed. Finally, and uniquely within recent memory, one turned up on the No.4 bed wetland on 19 November.

Yellowhammer returned to the ringing list for the bed for the first time since 2019 with three newly ringed on No.1 bed, including a male in breeding condition on 23 March and a juvenile on 15 August. One more was retrapped, having been originally ringed on 27 March 2019.

Reed Bunting

Emberiza schoeniclus

Amber listed

As a species largely associated with wetland margins Reed Buntings will, in time, hopefully benefit from the recent extension of such areas on the Reserve. Maximum counts from the first winter period were relatively low, with no notable roosts forming and included 12 on No.1 bed on 12 January and 15 on No.3 bed on 10 and 11 February, on both of which dates two males were in song. 10 were then still present on No.3 bed on 8 March. Our annual Breeding Bird Survey located 21 males in song: four on No.1 bed, four on No.2 bed, seven on No.3 bed and six on No.4 bed, which represents a slight increase on recent years. The only other breeding record came when a pair was feeding three recently fledged young in front of the Morgan Hide on 16 June. The second half of the year produced only modest double-figure counts, with 10 from a small roost in the flooded woodland on No.4 bed on 8 September, 12 feeding in the No.3 bed seed crop on 8 November, 11 on No.4 bed on 22 November and 15 again in the No.3 bed seed crop on 15 December.

From a ringing perspective it was another average year for Reed Buntings with 133 ringed, the 10-year average being 138. Fortunes, though, differed between the two beds. On No.1 bed the 45 ringed was the lowest total since 2015 and the third lowest total since 1995. The continuing change in the habitat on the bed, as tipping operations continue apace, is no doubt contributing to this decline. A further 27 were retrapped from earlier years, from No.3 bed or elsewhere in the UK. The oldest of those originally ringed on No.1 bed was from 26 April 2017 with four from 2018, one from 2019 and the remainder from the previous two years. 10 were caught in breeding condition, four females and six males and the only capture in juvenile plumage was on 15 June. The majority 55, were caught in the first six months of the year, with one in July, two in August and just 14 in the last four months. On No.3 bed 88 were ringed during the year, which is above the average of 57. The first juvenile was ringed on 2 July, 8 were ringed in wholly juvenile plumage and therefore locally bred. Another 29 were ringed as juveniles, but later in the year and therefore could have been hatched elsewhere. There were retraps from 2019 (2), 2020 (2) and 2021 (7).

ESCAPES

Harris's Hawk

Parabuteo unicinctus

An escaped falconer's bird frequented Nos.2 and 3 beds between 15 and 21 April and was watched actively hunting over both beds.

WeBS COUNTS 2022

The Wetland Bird Survey (WeBS) is organised jointly by the British Trust for Ornithology (BTO), the Wildfowl and Wetlands Trust (WWT), the Royal Society for the Protection of Birds (RSPB) and the Joint Nature Conservation Committee (JNCC). WECG has been contributing data to this survey since 1978. Counts from over five hundred sites are analysed by the BTO and used to assess species' trends and to aid in habitat conservation. The WeBS counts were critical in establishing the Reserve's status as a Site of Special Scientific Interest (SSSI).

	Jan	Feb	Mar	Apr		Sep	Oct	Nov	Dec
Canada Goose	63	39	76	60		99	136	81	17
Greylag Goose	41	104	16	21		37	48	211	2
Pink-footed Goose	0	0	0	0		0	0	0	6
Mute Swan	51	33	21	23		23	16	9	8
Shelduck	12	17	16	16		0	0	3	2
Mandarin Duck	2	0	0	0		0	0	0	15
Garganey	0	0	0	1		2	0	0	0
Shoveler	98	167	17	37		237	138	235	43
Gadwall	96	84	87	177		300	66	71	51
Wigeon	0	0	0	0		2	5	0	0
Mallard	182	121	80	67		146	101	131	115
Pintail	2	0	0	1		0	0	0	5
Teal	466	276	53	41		627	150	256	255
Pochard	2	15	31	43		0	0	5	0
Tufted Duck	755	432	295	195		45	56	100	540
Goldeneye	2	1	0	0		0	0	0	1
Goosander	0	0	0	0		0	0	0	2
Water Rail	2	1	0	3		3	3	4	9
Moorhen	31	21	11	24		31	15	31	27
Coot	117	131	110	102		85	12	41	75
Little Grebe	0	14	35	18		35	24	22	6
Great Crested Grebe	0	6	21	25		2	2	8	4
Black-necked Grebe	0	0	12	29		0	0	0	0
Oystercatcher	0	0	0	1		0	0	0	0
Lapwing	60	32	7	3		4	59	68	0
Little Ringed Plover	0	0	3	0		1	0	0	0
Curlew	0	0	1	0		0	0	0	0
Black-tailed Godwit	0	0	0	0		35	10	0	0
Dunlin	0	0	0	0		1	0	0	0
Little Stint	0	0	0	0		1	0	0	0
Woodcock	0	0	0	0		0	0	1	2
Jack Snipe	0	0	0	0		0	3	0	0
Snipe	0	1	2	1		9	21	2	0
Common Sandpiper	0	0	0	1		1	0	0	0
Green Sandpiper	0	0	0	0		4	0	3	1
Redshank	0	0	2	0		0	0	0	0
Black-headed Gull	217	155	510	500		0	142	142	113

Common Gull	2	0	4	0		0	0	1	2
Great Black-backed Gull	3	7	0	1		0	0	17	2
Herring Gull	0	1	4	8		0	0	0	6
Lesser Black-backed Gull	11	13	100	25		4	0	3	2
Cormorant	29	22	3	17		6	4	25	31
Grey Heron	2	2	3	2		7	4	4	11
Little Egret	0	0	0	0		0	2	0	0
Kingfisher	0	1	0	4		2	0	1	2
Common Tern	0	0	0	1		0	0	0	0

Brian Martin



Rarity Round-up

Ferruginous Duck

Aythya nyroca

Previous Woolston records	Previous Cheshire records	UK status	Conservation status
5	c.23	c.9 records per year	Near Threatened

Note it is difficult to assess the number of birds involved with previous county records, due to birds moving between sites and returning for many years. The true number of birds will be much lower.

30 April has always been a good date on the Woolston calendar, with several good birds for the reserve falling on this date – not least the *gambelli* White-crowned Sparrow in 2016. After finding a Temminck's Stint on No.4 Bed two days prior, I suspected spring was over and done with...

The weather was fair, with largely clear skies and a light south-westerly breeze, though little was stirring. The visible migration over No.4 Bed was headlined by a slight passage of Yellow Wagtails, but also some Swifts and a handful of waders through. As the morning ended, several of us decided to retire to No.3 Bed, just to check...At first glance from the John Morgan Hide, there was a small flock of sleeping *Aythya*, predominantly Tufted Duck though some Pochard mixed in. By late April, most Pochard are busy settling down for the breeding season, and Tufted Duck are well into pairing up, so it seemed like an obvious arrival. A courtesy scan with my binoculars turned up a smaller, rufous-toned bird, with an obvious white triangular patch under the tail and short body. It isn't uncommon for female Tufted Duck to show a white undertail, so I presumed this bird would be another case, but the apparent size and colour sparked interest. Unfortunately, I'd left my scope in the car, and the birds were distant, so I continued scanning in the hope the flock woke up...

It wasn't too long after before the flock were all awake and actively diving, and whilst panning back across, sure enough, a female Ferruginous Duck bobbed back up after a dive. Still alongside both aforementioned *Aythya*, the size was still obvious, as was the colour, but now the steep forehead and peaked crown, and longer bill were on show too. A quick look down the hide and no one had a scope with them, so I called out there was a female Ferruginous Duck with the diving duck flock straight out from the hide, but before putting news out widely it would be good to check with a scope, just to rule out a convincing hybrid look-alike, and to see if the bird had any obvious rings. I let the other reserve wardens know, in the hope of some more help opening up, whilst I ran to my car to grab my scope. Sure enough, the bird was still present and looked spot on. The bird flapped several times, proving all flight feathers were present and correct, and that the wing pattern/belly were in keeping with the identification. As well as diving, it was also watched catching flies off the water's surface. News was put out more widely on BirdGuides and various local WhatsApp groups, and several wardens helped open up to non-permit holders hoping to add this bird to their county lists.

The bird remained visible from the John Morgan Hide for the rest of the afternoon, allowing for a successful twitch. Despite being the 24th county record, it constitutes the first record since 1995 and the first twitchable record for longer still.

Many thanks to those that helped, namely David Spencer and Kieran Foster, who manned the gate.



- Compact shape, relatively short-bodied appearance.
- High forehead, narrow head with bulging cheeks as viewed head-on.
- Neat, completely white undertail coverts.
- Dark, warm, brown flanks contrasting with darker mantle and tail, rufous toned head.
- Flanks solid in colour, variable paler crescents, no grey.
- Undertail coverts separated from flanks by neat, darker feathering.

- White belly strongly demarcated from flanks/breast.
- Neck/breast concolorous with flanks, no sharp contrast.
- Head peaked, two paler spots, one at lores and one on ear coverts.
- Dark eye.
- Long grey bill, culmen largely straight but bends at tip.
- White secondaries into inner primaries, P10-P5 more sullied.
- Smaller than both accompanying Aythya (Tufted Duck pictured)



White-tailed Lapwing

Vanillas leucurus

Previous Woolston records	Previous Cheshire records	Previous British records	Conservation status
0	0	7/8	Least Concern

One of Woolston's nest recorders, Mike Lloyd, had called into No4 Bed on the evening of 31 May, to complete a follow-up visit for the BTO's Nest Record Scheme. Despite having heard the White-tailed Lapwing in neighbouring Greater Manchester had done a bunk overnight, the prospect of it turning up on the reserve still felt slim, (this species typically wanders the country and had previously done so prior to visiting GM). Well, fast forward to the evening of 31 May, and Mike was fortunate to find said lapwing on the eastern cell of the new wetland on No4 Bed. Time to panic! Time to panic!



A text was sent out to site wardens to give them a head's up and begin making arrangements for a twitch – thankfully this bird had already done a tour of several counties so there wouldn't be as much interest as a 'new' bird, but it was still a first for Cheshire.

I'd been sat at home writing an article about Woolston Eyes when my phone pinged – how apt! Like several of us, I raced to my car, only to find a slow puncture. Thankfully the tyre still took air and it wasn't long before I arrived onsite, to be greeted by Mike leaving, grinning ear to ear, as you would be! Mike hadn't seen the bird again before leaving, but was also preoccupied gathering essential breeding bird data, so I didn't let this act as a deterrent. After a stressful walk around the cell, scoping from several vantage points, there it was...lurking in vegetation at a pool's edge. By this point, several wardens had arrived and we all managed semi-decent views, both on deck and in flight. The breeding (Northern) Lapwings weren't too impressed and regularly chased the White-tailed, allowing for some nice flight views, revealing the impressive black-and-white wing pattern. The bird was also vocal. What a great bird for the reserve, and even better to watch it walk around the parked diggers (the wetland was still under construction!). Whilst sorting out final arrangements, it flew off high, before circling back and dropping onto the western cell of the new wetland. An even more ideal site for a twitch.

News was released on BirdGuides and various WhatsApp groups, and by the end of the evening anyone able to see the bird succeeded (just c.20 all in all!). I watched the bird until dusk and locked up. It was unknown whether the bird would stick overnight, so plans were again arranged to allow access to anyone wishing to see this rare vagrant. Typically, the bird disappeared overnight, and had been relocated 64miles to the south, at Sandwell Valley RSPB, West Midlands.

Note:

At the time of writing, it hasn't been decided whether one or two birds were involved with all records ranging between Blacktoft Sands RSPB, East Yorkshire (from 26 August 2021), and Sandwell Valley RSPB, West Midlands (1 June 2022). With some observers inclined to think a new bird was responsible for all reports at Hickling Broad NWT, Norfolk, and thereafter. The attached BirdGuides map shows the track for Hickling Broad NWT-Sandwell Valley RSPB only.



Eurasian Penduline Tit

Remiz pendulinus

Previous Woolston records	Previous Cheshire records	UK status	Conservation status
0	1	Annual in Southern England small numbers	Least Concern

Ringling has taken place at Woolston Eyes SSSI for some 40 years, by Merseyside Ringing Group. The primary purpose of course is to monitor bird populations across the reserve, by providing survival and productivity data, though ringling also happens to be the best way to find scarce passerines on the reserve due to the extensive and dense scrub.

Routine ringling sessions take place on No3 Bed every Saturday morning, and so 12 November was no different. Weather conditions were good and the morning proved to be busy. A Penduline Tit had been a brief visitor to Pennington Flash CP, Greater Manchester, several days prior and so conversation around the ringling table naturally turned to this, though unlikely as it seemed (it's the hope that kills you!). This said, I'm not sure anyone expected to catch a/the Penduline Tit, but mid-morning a couple of the trainee ringers safely extracted just that...As it was also WeBS weekend, myself and several other wardens were scattered across the reserve counting wildfowl, and so a quick message was broadcast by the ringling team giving us the heads up. Fortunately, timing was great and everyone was close by at the time.

Next came the tricky bit...the ageing and sexing of Penduline Tits isn't easy, but luckily two generations of primary coverts were evident, making this bird a first calendar-year. Sexing wasn't possible, though I suspect the bird was a male due to an already well-developed mask, rich mantle tones and a faint rufous breastband was apparent at certain angles.

As with all county/national rarities, the reserve was committed to opening up to non-permit holders. However, there was strong suspicion the bird would disappear in the extensive habitat, so news was broadcast on the basis that if the bird was refound subsequently then non-permit holders would be granted access. Sadly, but as expected, there was no further sign after release.

That was however, until 22 November, when David Bowman and myself were walking around the eastern cell of the newly created wetland on No4 Bed, ahead of an upcoming project meeting. The cell had only just been completed earlier the same week, but following some needed rain, the place was active with birdlife; chiefly wildfowl, but also Pied Wagtails and Meadow Pipits strewn across the fresh mud. Some parts of the cell had been dug several months ago, and as a result were already vegetated with nice stands of *Phragmites*, plus smaller areas of *Typha* and *Juncus*. We spilt up, as I jested how an Eastern Yellow Wagtail or even a Water Pipit would be nice. It wasn't long before I picked up a familiar, high-pitched, piercing call coming from a *Phragmites* bed on the opposite end of the cell. The bird was distant, but the call was clear enough I could be sure of the ID. I called David over, and whilst doing so I picked up the bird sat atop a distant willow. Of course, the bird was almost certainly the bird that had been ringed on No3 Bed 10 days ago, but curiosity prevailed and we wanted to see its legs.

It didn't take long before the bird worked its way along the *Phragmites* bed and better views were obtained, and a shiny metal ring was noted on the right leg. Photographs and sound recordings were then taken, before the bird continued its apparent feeding circuit back into the reeds.

The discussion again turned to opening up to non-permit holders, and volunteers were quickly organised to help do so. News was released on BirdGuides and local WhatsApp groups, and the reserve remained open to all for the remainder of the day, and again on 23rd. Sadly the bird behaved as many Penduline Tits do and was stubbornly elusive for much of the two days, though most county listers eventually connected. The bird seemingly went to ground, but the reserve opened again on 26th to give anyone too busy during the week a chance to try, though sadly the bird wasn't seen again.

This constitutes the first record for Woolston Eyes, taking the reserve list up to 246, and was also just the second record for Cheshire, following one at Moreton in 1986. It is also the 36th to be ringed under the BTO ringing scheme. It is widely suggested that the Woolston bird and the Pennington bird are one and the same, given local rarity value but there are also similarities between both birds, though it should be stated there are differences in picture quality.

A sound recording of the bird can be found here - <https://macaulaylibrary.org/asset/538673571>



- Note the outermost primary coverts are narrower and pointed, with whitish tips (highlighted red). The innermost are moulting, with rounded ends (highlighted yellow).





Male Brambling Dan Owen

WOOLSTON EYES RINGING REPORT 2022

Ringing operations in 2022 were carried out in two areas of the Reserve, the east end of No.1 Bed and the centre of No.3 Bed.

The year ended with 6,106 of 63 species ringed. This represents an increase of 40% when compared with 4,351 of 55 species, ringed in 2021. As is usually the case, there are a number of different factors at play. One of these is ringing effort. On No.1 Bed ringing took place on 121 days in 2022 compared with 98 days in 2021. For No.3 Bed the equivalent figures were 104 days in 2022 compared with 79 days in 2021. On both beds about half of these “extra” visits took place in January and early February, the period corresponding to the lockdown in 2021. In that early year period only 300 were newly ringed. It follows that, whilst extra ringing effort has contributed to the improved returns, it in no way explains a 40% increase in numbers ringed and it is apparent that a number of species enjoyed a favourable breeding season.

At the time of writing Woolston has escaped the worst impacts of Highly Pathogenic Avian Influenza (“Bird Flu”) but with wildfowl particularly badly affected in the wider countryside, a decision was taken to voluntarily refrain from deploying the fixed duck trap on No.3 Bed during the first winter period. In the second winter period water levels were not conducive to its use and as a result just five Teal were ringed in the year, and none were re-trapped. Just three Woolston Teal were reported elsewhere, two shot near Northwich and one re-trapped, a rare occurrence, in Monmouthshire. Just a single Mallard found its way into a trap. The opportunistic deployment of Potter Traps accounted for three Water Rails, three Coots and nineteen Moorhens. At the end of the year the team on No.3 Bed joined a national project to attach coloured Darvic rings to Moorhens. Experience shows that the use of these Darvics significantly increases the rate at which birds are reported and it will be interesting to see where ‘Woolston’s Moorhens’ turn up.

An exciting event was the addition of Marsh Harrier to the list of species ringed. The first proven breeding on the Reserve resulted in the ringing of two chicks, both males. A second year Hobby was caught at a Swallow roost on No.1 Bed on 25 August, just the fourth to be ringed at Woolston. The only other raptors ringed in 2022 were three Sparrowhawks, one on No.1 Bed and two on No.3 Bed. Unusually, two of these were the larger females which might normally be expected to escape from the net.

On No.3 Bed the seasonal net across the channel by the Duck Trap was deployed on four occasions. Just five captures were made but three of these were of the target species, Green Sandpiper. All were juveniles. With the wetland on No.4 Bed becoming increasingly attractive it is likely that we will settle to a lower catching rate than we have enjoyed historically on No.3 Bed. A single adult female Snipe was ringed when it wandered into the un-set duck trap.

Just two Woodpigeons and two Stock Doves were ringed in 2022. This low level of catches has become the “new normal” as the most favoured net for these species on No.3 Bed has fallen into disuse. The only owl ringed in 2022 was a female Barn Owl caught on the North Meadow of No.3 Bed in a net set for Tawny Owls.

A total of 13 Kingfishers were ringed across the Reserve, a big improvement on the five ringed in 2021. Of these, 12 were juveniles indicating some local breeding success - 11 were ringed on No.1 Bed including four caught together in the same net. Just two were ringed on No.3 Bed where limited use of the net set for Green Sandpipers also limits opportunities to catch Kingfishers.

A typical 18 Great Spotted Woodpeckers were ringed. Of these, 11 were aged as juveniles. Eight Magpies were ringed, predominantly on No.3 Bed where they are prone to enter the traps set for Moorhens. Out of 10 Jays ringed, seven of these on No.1 Bed where three females were caught in breeding condition.

In what was probably the ringing highlight of the year, a first-winter Penduline Tit was caught on 12 November near the Sybil Hogg Hide on No.3 Bed. A first for Woolston, this was just the second Cheshire record and was almost certainly the bird seen some days earlier at Pennington Flash.

Both Blue Tits and Great Tits had a reasonable breeding season in the nest boxes with 147 chicks ringed on No.3 Bed (2021-137, 2020-134 and 2019-173). In terms of total numbers ringed, both species totals were similar to 2021 and significantly below the respective five-year averages up to 2020. In view of the increase in ringing effort in 2022 it would appear that these two species, whilst breeding reasonably well on the Reserve, are not doing so well in the surrounding gardens. Just 11 Coal Tits were ringed, the lowest total since 2014. The low total resulted from the absence of an autumn movement through No.1 Bed.

It is not easy to know how to interpret the ringing results for Willow Tit. It is true that on No.1 Bed the ringing footprint has changed in the last two years and that on No.3 Bed, two areas where the species has been encountered historically have not been targeted in the last two years. Notwithstanding these potentially mitigating factors, the total of just 15 Willow Tits ringed in 2022 must be a cause for concern. Thirteen of these were juveniles and just three birds were recaptured from previous years. The following totals for the number of different Willow Tits handled by the two ringing teams combined sets out the situation starkly: 2018-54, 2019-50, 2020-24, 2021-32, 2022-18. It is to be hoped that a whole Reserve survey in 2023 will show a better picture.

After two blank years a small autumn hirundine roost formed on No.1 Bed in the latter part of August. This said, the total of 24 Swallows ringed is still a small fraction of the numbers from years past. The pre-breeding roost of Sand Martins that was a notable event on No.3 Bed in spring 2021 did not repeat itself on the same scale although a smaller roost formed for a few days. The twelve ringed would have been a typical number for recent years prior to 2021. A first-year House Martin caught on No.1 Bed on 8 September was the first at Woolston since 2018. After two fairly poor years the 142 Long-tailed Tits ringed in 2022 compared well with the 10-year average, up to 2019, of 133. One was re-trapped on No.1 Bed that had been ringed on 14th September 2015, a very good age for a small passerine.

A total of 2,529 warblers of eleven species was ringed in 2022 compared with 1,522 of 10 species in

2021. The “extra” species was a first-year Yellow-browed Warbler caught on No.1 Bed on 3 October. Whilst additional ringing effort is a factor it does not account for this 66% increase. Cetti’s Warbler marches on relentlessly. The 56 ringed being nearly twice the next best total of 29 in 2020. Clearly, my comments in last year’s report about the species reaching density dependence, with the habitat reaching maximum carrying capacity, were well wide of the mark. As No.4 Bed develops, new habitat for this species will form.

I finished my report on the poor results for 2021 thus. “If there is a “silver lining” in this generally depressing picture of our migrant warblers it is that the clear cause was a poor breeding season. The impact of this can swiftly be reversed in multi-brooded species just so long as the 2022 breeding season is a good one.” For most warblers that is exactly what happened. A truly amazing total of 914 Chiffchaffs were ringed eclipsing the previous best of 699 in 2017. Other warblers ringed in good numbers, with 2021s total in brackets, were Blackcap 686 (415), Reed Warbler 512 (328) and Sedge Warbler 114 (66). In the case of Sedge Warbler only twelve were ringed on No.1 Bed whereas the 102 on No.3 Bed was well above the average of 70. Why experience differed so much between beds is unclear. In the case of Willow Warbler, whilst the total of 124 ringed was an improvement on the 100 in 2021, the 10-year average up to 2020 is 168. The amount of suitable habitat for this species at Woolston is reducing as a result of woodland succession and this is probably behind the long-term decline. Common Whitethroats bucked the trend in 2021 so the 88 ringed in 2022 and the 83 in 2021 are typical of recent years. Amongst Warblers ringed in smaller numbers Garden Warblers mirrored the improvement seen in other species with 29 (13). A typical three Lesser Whitethroats were ringed, all juveniles dispersing in late summer. Finally, two Grasshopper Warblers were ringed, both juveniles, one on each bed. The one from No.3 Bed on 28 July was recaptured sixteen days later on the southwest coast of France. This is the first Merseyside Ringing Group ringed Grasshopper Warbler to be recaptured overseas.

The following comments concerning first juveniles are drawn from the combined experience on the two beds.

The following first ringing dates for juvenile birds indicate that for resident species the timing of their breeding season was within the normal range.

Ringling date of first juvenile

	2022	2021	2020	2019
Robin	21-May	27-May	25-May	07-May
Wren	15-Jun	04-Jun	09-Jun	09-Jun
Dunnock	01-June	26-May	22-May	11-Jun
Bullfinch	15-Jun	18-Jun	07-Jun	23-May

In the case of our migrant warblers the following table of “first juvenile” dates indicates that, with the exception of Chiffchaff, 2022 shows a return to “normal” after a late breeding season in 2021. Although the first date for Chiffchaff is a few days later than normal, the species had an exceptional breeding season as has already been noted.

Ringling date of first juvenile

	2022	2021	2020	2019
Chiffchaff	06-June	28-May	26-May	31-May
Blackcap	04-Jun	17-Jun	07-Jun	09-Jun
Whitethroat	11-Jun	26-Jun	16-Jun	09-Jun
Reed Warbler	24-Jun	26-Jun	16-Jun	22-Jun

Amongst the resident species, the 214 Wrens ringed was the highest total since 2007 and nearly double the total in 2021, whereas Robins were ringed in typical numbers as were Dunnocks after a poor year in 2021. For several years Treecreepers had been increasing at Woolston, if ringing records are the guide, until setbacks in 2020 and 2021. In 2022 this species bounced back with 21 ringed. Nuthatch has been annual in the ringing totals since 2016 and is now expected in small numbers so the three birds ringed is a typical total.

A total of just 51 Blackbirds was ringed, well below the 10-year average of 77. For the second year running, Blackbirds were caught in particularly low numbers on No.3 Bed, where the first juvenile was not caught until 16 July, admittedly an improvement on 31 July in 2021 but still a late date. Why early broods should be particularly prone to fail on this bed is unclear. The 31 Song Thrushes ringed was exactly the same as in 2021 and not far below the 10-year average of 38. Once again the first juvenile was not ringed until 13 July. Redwings are an irruptive species with numbers arriving varying from autumn to autumn. It was not a big “Redwing year” and with 95 birds ringed, the year was below the 10-year average of 146.

Passage migrants were well represented with three Redstarts and a Whinchat ringed on No.1 Bed and a Stonechat on No.3 Bed. Unusually, two of the latter were caught on No.1 Bed in spring, with a Redstart and a Whinchat in the same net round on 18 April.

Meadow Pipits are ringed on passage and numbers fluctuate. The total of 24 in 2022 was the lowest since 2012. Five of these were caught in spring on No.1 Bed and the rest on autumn passage. Four Tree Pipits were ringed during their autumn passage. Unusually, three of these were caught on No.3 Bed where passage is usually less prominent than on No.1 Bed. Twenty-four Grey Wagtails was the best total since 2017. For the second year running, a first-year Pied Wagtail was caught on No.1 Bed.

This is Woolston’s fourth record in the last twenty years.

The eight species of finch that appear regularly in this report had mixed fortunes. Two comments that I have read recently about Chaffinches are, firstly, that Trichomonosis has moved from Greenfinches into Chaffinches and secondly, that a warming climate has reduced the winter influx of continental finches into the U.K. Whatever the reason, the 176 Chaffinches ringed in 2022 is the lowest number since 2004, which is the same comment I made about the 215 ringed in 2021. None were caught in the breeding season on No.3 Bed and just a single male in breeding condition on No.1 Bed. Last year I said, “It is probably unhelpful to compare the 302 Greenfinches ringed with a 10-year average as we adjust our expectations to a “new normal” given the endemic nature of Trichomonosis” and the same comment applies to the 374 Greenfinches ringed in 2022, albeit this is an improvement on 2021. On a brighter note, the first winter period constituted a phenomenal “Brambling Winter” and 585 of this irruptive species were ringed, which is more than double the previous highest total of 251 in 2018. Bullfinches, for which Woolston has been a stronghold, continue to decline and the 102 ringed is the lowest number since 2008, again, the same comment I made about the 136 in 2021. In the case of Goldfinches, 50 were ringed compared with a 10-year average of 33 and this represents a good year if the two exceptional “thistle years” are discounted.

Lesser Redpolls are irruptive at Woolston and were present in average numbers on No.1 Bed but above average on No.3 Bed. The total of 109 was well above the 10- year average of 77. Siskins are never caught in numbers, with just two, one on each bed. In recent years the same could be said for Linnets and four was an average number. After two blank years it was good to see Yellowhammer reappear on the list, with three ringed on No.1 Bed. A fourth was caught that had been ringed in 2019.

It was another average year for Reed Buntings with 133 ringed, the 10-year average being 138.

It was a busy year for individual species milestones with the 18,000th Greenfinch, 13,000th Blue Tit, 11,000th Chiffchaff, 7000th Chaffinch and 4,000th Goldcrest amongst species we ring in good numbers. Amongst the comparative scarcities we ringed our 2,500th Lesser Redpoll, 1,500th Brambling, 1,100th Garden Warbler, 1,000th Goldfinch, 400th Jay and 200th Cetti's Warbler.

Not surprisingly, the Penduline Tit ringed on No.3 Bed was the first for the Reserve, as were the two Marsh Harrier chicks so the number of different species ringed at Woolston rises to 114.

All birds are ringed by members of Merseyside Ringing Group, licensed under the Wildlife & Countryside Act 1981 by the [BTO](#) (British Trust for Ornithology). Ringing in Britain is supported by the [INCC](#) (Joint Nature Conservation Committee) on behalf of the government's nature conservation agencies including Natural England. Data on all birds ringed and re-trapped are computerised and submitted to the BTO for incorporation into the national database and large-scale analyses. Readers wanting to know more of the technical aspects of ageing and sexing birds can find many photographic examples of Woolston birds on the Merseyside Ringing Group website: <https://www.merseysiderg.org.uk/>

Michael Miles on behalf of the ringing team (John Blundell, Kieran Foster, Rebecca Jones, Dan Owen, Jen Page, David Riley and Amy Sherwin)



Water Rail Dan Owen



Tree Pipit Dan Owen



Barn Owl George Dunbar

RINGING TOTALS 2022

			Reserve Total	Grand Total
SPECIES	No.1	No.3	2022	1980-2022
Teal		5		916
Mallard		1	1	99
Marsh Harrier			2	2
Sparrowhawk	1	2	3	145
Hobby	1		1	4
Water Rail	1	2	3	108
Moorhen		19	19	363
Coot		3	3	41
Green Sandpiper		3	3	53
Snipe		1	1	67
Stock Dove	1	1	2	85
Woodpigeon	1	1	2	146
Barn Owl		1	1	12
Kingfisher	11	2	13	168
Great Spotted				
Woodpecker	5	13	18	434
Magpie	1	7	8	165
Jay	7	3	10	400
Goldcrest	265	95	360	4,160
Penduline Tit		1	1	1
Blue Tit	117	210	327	13,140
Great Tit	90	220	310	8,792
Coal Tit	6	5	11	312
Willow Tit	7	8	15	941
Sand Martin	1	11	12	1,452
Swallow	20	4	24	14,667
House Martin	1		1	109
Cetti's Warbler	16	40	56	231
Long-tailed Tit	75	67	142	4,674
Yellow-browed Warbler	1		1	9
Chiffchaff	511	403	914	11,248
Willow Warbler	84	40	124	8,811
Blackcap	274	412	686	14,711
Garden Warbler	14	15	29	1,110
Lesser Whitethroat	2	1	3	284
Whitethroat	19	69	88	5,533
Grasshopper Warbler	1	1	2	211
Sedge Warbler	12	112	114	5,870

Reed Warbler	188	324	512	13,874
Nuthatch	1	2	3	31
Treecreeper	11	10	21	357
Wren	97	117	214	6,883
Blackbird	25	26	51	3,122
Song Thrush	16	15	31	1,454
Redwing	20	75	95	1,906
Robin	92	65	157	5,513
Redstart	3		3	33
Whinchat	1		1	4
Stonechat		1	1	7
Dunnock	27	84	111	4,461
Grey Wagtail	18	6	24	174
Pied Wagtail	1		1	47
Tree Pipit	1	3	4	57
Meadow Pipit	19	5	24	1,182
Chaffinch	96	80	176	7,039
Brambling	143	442	585	1,523
Greenfinch	90	284	374	18,371
Goldfinch	14	36	50	1,020
Siskin	1	1	2	93
Linnet	1	3	4	1,147
Lesser Redpoll	49	60	109	2,520
Bullfinch	22	80	102	4,331
Yellowhammer	3		3	104
Reed Bunting	45	88	133	7,956
Others (51 species).				1,693
Totals	2,529	3,575	6,106	18,4376

SELECTED RECOVERIES AND CONTROLS

This section lists some of the Woolston-ringed birds that were reported from elsewhere (recoveries') and birds caught at Woolston already wearing rings ('controls'). In addition to these birds, numerous birds ringed at Woolston were caught again ('re-trapped') on the Reserve this year, some of them having undertaken long journeys in between ringing and recapture, and these all add to our knowledge of migration, survival/ mortality and longevity, habitat use and so on.

The age when ringed and method of finding are coded as follows:

- 1 Pullus (nestling or chick)
- 1J Fledged, but flying so weakly that it is obviously incapable of having flown far from nest.
- 2 Fully grown – year of hatching unknown
- 3 Definitely hatched during the calendar year of ringing
- 3J Definitely hatched during the calendar year of ringing and still completely or partially in juvenile body plumage
- 4 Hatched before calendar year of ringing – exact year unknown
- 5 Definitely hatched during previous calendar year
- 6 Hatched before last calendar year – exact year unknown

Sex, when determined at time of ringing or finding:

- M Male
- F Female

Circumstances of finding:

- R Caught and released by a ringer
- B Breeding
- RR Alive and probably healthy, ring or colour marks read in the field by ringer
- VV Alive and probably healthy, ring or colour marks read in the field by non-ringer
- SR Sick or injured – released with ring
- S Sick or injured – not known to have been released
- X Found dead
- XF Found freshly dead or dying
- // Circumstances of finding unknown
- +F Shot

Greylag Goose

5260483 3M 24/10/2013 Baddiley Meres, Nantwich, Cheshire SJ5950

VV 02/11/2021 Woolston Eyes No 3 bed, Warrington SJ6588 40km 9°

A bird with this ring number was reported dead (road casualty) on 24/10/2014 in Hodnet, Shropshire so the BTO were surprised to receive this sighting from Woolston. After many email exchanges and data checks, the BTO noted that the report from Shropshire did not mention a colour ring and assumed it must relate to a different bird. The colour-ring on the Woolston bird was verified by a photograph so the record has been accepted.

Shelduck

GV79271 4M 19/11/2018 Martin Mere Swan Pipe, Lancashire,
VV 26/02/2022 Woolston Eyes No 3 Bed, Warrington, SJ6488 35KM 139°
This Shelduck returned to Woolston for a second winter. The ring was read again on 20/05/2022

Teal

EA68580 5M 29/02/2020 Woolston Eyes No 3 bed, Warrington
R 20/01/2022 Hales Wood, Monmouthshire SO3513 175km 190°
A rare example of a Woolston Teal being “controlled” without being shot.

Teal

EA84046 5M 20/03/2021 Woolston Eyes No 3 bed, Warrington
+F 20/01/2022 Arley Hall, Northwich, Cheshire SJ6780 10km 167°

Teal

EA32314 4M 23/02/2019 Woolston Eyes Bed No 3, Warrington
+ 10/12/2022 Marston, Northwich, Cheshire 14km 176°

Coot

GV14164 4 14/11/2020 Pennington Flash, Leigh, Gr Manchester SD6498
W (N) J4S VV 26/02/2022 Woolston Eyes No 3 bed, Warrington 12km 175°

Black-headed Gull

EZ90936 6 09/02/2019 Woolston Eyes Bed No 3, Warrington
R 02/12/2022 Taylor Park, St Helens, Merseyside 17km 290°
This is the only Black-headed Gull to be ringed at Woolston since 1998.

Kingfisher

SB3188 3M 02/07/2022 Woolston Eyes Bed No 3, Warrington
R 05/08/2022 Betley Mere, Betley, Staffordshire SJ7447 42km 167°
Young Kingfishers are chased out of the territory where they hatched by their parents.

Blue Tit

AJL4565 3 04/10/2021 Woolston No 1 Bed, Warrington
R 13/11/2022 Lostock, Poynton, Cheshire 25km 103°

Great Tit

TY14822 3F 06/10/2021 Woolston Eyes Bed No 1, Warrington
XF 13/11/2022 Broomedge, Lymm, Warrington 5km 139°

Cetti's Warbler

AAX4032 3J 21/07/2022 Woolston No 3 Bed, Warrington
R 25/09/2022 Middleton NR, Lancashire, SD4159 75km 342°
Young Cetti's Warblers undertake significant post-fledging dispersal.

Cetti's Warbler

AAX4984 2 24/09/2022 Woolston No 3 Bed, Warrington
R 22/11/2022 Frodsham Marsh, Cheshire 20km 225°



Chiffchaff

NBL739 3 12/09/2021 Flamborough Head, Yorkshire TA2471
 B (F) 16/07/2022 Woolston Eyes Bed No 3, Warrington 180km 243°

Chiffchaff

NRD010 3 06/09/2021 Tittesworth Reservoir, Staffordshire SJ9959
 R (M) 20/07/2022 Woolston Eyes Bed No 1, Warrington 44km 313°

Both of these Chiffchaffs were probably migrating when ringed in autumn 2021 and both were in breeding condition when re-captured at Woolston.

Chiffchaff

CHT529 3 22/08/2009 Woolston Eyes Bed No 1, Warrington
 R 17/09/2010 Les Moutiers-En-Retz, Loire-Atlantique, 47°02'N 2°00'W, France 705km 178°

Why this record took twelve years to appear in the data is a mystery.

Willow Warbler

LBH956 4 30/03/2021 Woolston Eyes No 3 Bed, Warrington
 R 28/03/2022 Marais de Paluden, Hoedic, Morbihan, 47°19'N 2°52'W France 675km 183° This Willow Warbler was nearing the end of its spring migration from sub-saharan Africa when recaptured in Brittany.

Blackcap

AJL4117 4M 28/06/2021 Woolston Eyes No 1 Bed, Warrington.
 R 10/04/2022 Blackburn Meadows NR, Rotherham, Yorkshire SK4019 74km 89°

Blackcap

AZB0367 3F 05/09/2018 Litlington, East Sussex TQ5201
 R 16/04/2022 Woolston Eyes Bed No3, Warrington 342km 328°

Blackcap

ATD0097 3J (F) 09/08/2018 Woolston Eyes No 3 Bed, Warrington
 R 28/04/2022 near Elton, Bury, Greater Manchester SD7909 27km 33°

Blackcap

AJR2704 5F 23/04/2022 Woolston No 3 Bed, Warrington R
 29/09/2022 Chippenham, Wiltshire ST9173 215km 173°

Blackcap

AAX4629 3JM 25/08/2022 Woolston No 3 Bed, Warrington
 R 17/09/2022 Walton Moor, North Somerset ST4373 216km 186°

These last two Blackcaps demonstrate the leisurely migration typical of a species that only has to go as far as Southern Europe or North Africa.

Grasshopper Warbler

AAX4128 3J 28/07/2022 Woolston Eyes No 3 Bed, Warrington
 R 13/08/2022 Terres d'Oiseaux, Braud-et-Saint-Louis, Gironde, 45°16'N 0°40'W, France 910km 172°



In an exceptional year for controls and recoveries of migrant warblers this is the most notable record. This is the first Grasshopper Warbler to be recovered in or controlled from a foreign country in the history of Merseyside Ringing Group. In 2021, the latest year for which figures are available, seventeen British-ringed Grasshopper Warblers were recovered overseas and three foreign-ringed birds were controlled in the U.K.

Sedge Warbler

ABR5862 3 11/08/2021 Haxton Down, Wiltshire SU1951
B (F) 28/07/2022 Woolston Eyes Bed No 3, Warrington 244km 348°

Sedge Warbler

Z572459 3 18/07/2022 Portmore Lough, Antrim, N Ireland IJ1168
R 03/08/2022 Woolston Eyes Bed No 3, Warrington 278km 118°

Sedge Warbler

AAX4306 3 06/08/2022 Woolston Eyes Bed No 3, Warrington
R 10/08/2022 Belvide Reservoir, Staffordshire SJ8609 81km 165°

Two examples of young Sedge Warblers starting their first southerly migration in early August, their parents will have departed earlier.

Sedge Warbler

AAX4380 3 11/08/2022 Woolston Eyes Bed No 3, Warrington
R 24/08/2022 Donges, Loire-Atlantique, 47°17'N 2°01'W, France 677km 177°

This Sedge Warbler moved to south-west France in 13 days showing the urgency associated with transSaharan migrants.

Sedge Warbler

8660306 3 15/08/2018 Mars-Ouest, Sant-Philbert-de-Grand-Lieu, Loire-Atlantique, France
R 20/04/2022 Woolston Eyes No 3 Bed, Warrington, SJ6488 699KM 356°

This Sedge Warbler was also controlled at Woolston in 2019, 2020 and 2021. Now four years old and a veteran of eight trans-Sahara crossings, this is the most frequently re-trapped foreign-ringed bird at Woolston.

Reed Warbler

AJR3183 4F 27/06/2022 Woolston Eyes No 3 Bed, Warrington
R 30/06/2022 Rostherne Mere, Knutsford, Cheshire SJ7484 9km 116°

Reed Warbler

ACV7767 3J 03/07/2022 Pickmere, Knutsford, Cheshire SJ6777
R 16/07/2022 Woolston Eyes Bed No 3, Warrington 12km 344°

Reed Warbler

AYL6718 3J 23/07/2022 Rostherne Mere, Knutsford, Cheshire
R 18/08/2022 Woolston Eyes Bed No 3, Warrington 11km 291°

Reed Warbler

JR3519 3J 12/08/2022 Woolston Eyes Bed No 3, Warrington



R 20/08/2022 Knutsford Moor, Cheshire 15km 142°

Reed Warbler

AJR3359 3J 27/07/2022 Woolston Eyes Bed No 3, Warrington

R 10/08/2022 Rainford, St Helens, Merseyside SD4901 22km 307°

These are five examples of young Reed Warblers exploring their natal area before setting off on their first southerly migration. This behaviour assists with selection of a breeding site in the following year.

Reed Warbler

AAX4255 3J 03/08/2022 Woolston Eyes Bed No 3, Warrington

R 23/08/2022 Icklesham, East Sussex TQ8815 352km 142°

Reed Warbler

AJR3447 3J 05/08/2022 Woolston Eyes Bed No 3, Warrington

R 20/08/2022 Stanford reservoir, Northamptonshire SP6080 144km 140°

Reed Warbler

AYH9037 3J 01/07/2020 Woolston Eyes Bed No 1, Warrington

R 31/08/2022 Squire's Down, Dorset ST7428 271km 179°

Reed Warbler

ADN6422 3J 19/08/2020 Pickmere, Knutsford, Cheshire SJ6777

R 23/05/2022 Woolston Eyes No 3 Bed, Warrington 14km 356°

Reed Warbler

ALK2976 3 23/08/2020 Woolston Eyes No 3 Bed, Warrington

B (F) 23/06/2022 Rostherne Mere, Knutsford, Cheshire 11km 111°

Reed Warbler

AVK4531 3J 01/08/2020 Coal Brook Pools, Hales, Shropshire SJ7132

B (F) 11/06/2022 Woolston Eyes No 3 Bed, Warrington 56km 354°

Reed Warbler

AAX4750 3J 20/08/2022 Woolston Eyes Bed No 3, Warrington

R 14/09/2022 Chenac-Saint-Seurin-d'Uzet, Charente-Maritime 45°30'N 0°49'W, France 885km 173°

Reed Warbler

AAX4864 3 03/09/2022 Woolston Eyes Bed No 3, Warrington

R 16/09/2022 Chenac-Saint-Seurin-d'Uzet, Charente-Maritime 45°30'N 0°49'W, France 885km 173°

Reed Warbler

ALK5191 4 26/06/2021 Woolston Eyes Bed No3, Warrington

R (F) 02/08/2021 Rostherne Mere, Knutsford, 11km 111°

R 23/08/2021 Evoa-Centro, Lisbon, 38°49'N 8°58'W, Portugal 1690km 197°

These two Reed Warblers demonstrate the rapid southerly movement of a trans-Saharan migrant.

Reed Warbler

AAX4697 3J 27/08/2022 Woolston No 3 Bed, Warrington
R 17/09/2022 Saint-Mard, Charente-Maritime, 46°6'N 0°40'W France 820k
171°

Reed Warbler

AAX4696 3J 27/08/2022 Woolston No 3 Bed, Warrington
R 17/09/2022 Saint-Mard, Charente-Maritime, 46°6'N 0°40'W France 820km 171°
In an exceptional year for controls and recoveries of Reed Warblers, these final two records are the most notable. Caught and ringed together from the same net at Woolston they were then controlled together on the coast of South-west France. It is tempting to think that they were siblings migrating together.

Song Thrush

RZ29818 3J 22/06/2019 East Holton Farm, Dorset Y9691
R 22/01/2022 Woolston Eyes No 3 bed, Warrington 298km 354°
In 2021, the latest year for which data are available, there were just five movements of more than 100km in the U.K. and Ireland reported for this species.

Brambling

AAP1655 3M 31/12/2021 Bedford Moss, Greater Manchester SJ6896
R 17/02/2022 Woolston Eyes No 3 bed, Warrington 9km 205°
The first winter period was exceptional for Bramblings. This is one of four birds ringed at Bedford Moss and re-trapped on No.3 Bed.

Brambling

NOS ES45605 3M 21/11/2021 Orin, Verdal, Nord-Trøndelag, 63°46'N 11°25'E Norway R
04/03/2022 Woolston Eyes No 3 bed, Warrington 1407km 215°

Brambling

NOS ES36500 3M 12/10/2021 Bomyra, Randaberg, Rogaland, 59°0'N 5°34'E, Norway
R 11/04/2022 Woolston Eyes Bed No3, Warrington 800km 219°
With hundreds of Bramblings passing through Woolston it was to be expected that connections would be made with their area of origin.

Brambling

AJR2371 5M 22/02/2022 Woolston Eyes No 3 Bed, Warrington
R 02/05/2022 Grenen, Skagen, Nordjyllands Amt, 57°43'N 10°37'E, Denmark 958km 60° A
recovery of a Woolston ringed Brambling on its return migration in spring is very unusual.

Greenfinch

PL73521 3F 25/11/2021 Black Brow Farm, Dunham, Greater Manchester SJ7488
R 09/01/2022 Woolston Eyes No 3 bed, Warrington 9km 270°

Greenfinch

TY15656 5F 04/01/2021 Woolston Eyes No3 Bed, Warrington
XF 13/04/2022 Lymm, Warrington SJ6988 5km 91°

This unfortunate bird succumbed to Trichomonosis.

Greenfinch

TWO4487 3F 29/10/2019 Woolston Eyes No 3 Bed, Warrington

SR 31/10/2022 Callands, Warrington SJ5890 7km 286°

By contrast, this lucky Greenfinch flew into a window but survived the experience and was later released.

Greenfinch

PL73719 3JF 03/09/2022 Checkley Hall, Nantwich, Cheshire SJ7246

R 06/11/2022 Woolston No 1 Bed, Warrington 42km 350°

Greenfinch

PF56119 3M 21/10/2022 Woolston No 1 Bed, Warrington

R 13/11/2022 Lostock Woodford, Poynton, Cheshire SJ9083 25km 103°

Lesser Redpoll

AAA6640 5M 27/04/2018 Penrhiw, Conwy SH8074

R 19/11/2022 Woolston No 3 Bed, Warrington 85km 75°

Lesser Redpoll

AAX9088 3 03/11/2022 Woolston Eyes Bed No 3, Warrington

R 07/12/2022 Skipwith Common NR, York, N Yorks SE6537 113km 64°

Reed Bunting

ALK7302 5F 23/01/2020 Moss Brow Farm, Warburton, Greater Manchester, SJ7089 4KM 91°

R 04/02/2022 Woolston Eyes No.1 Bed 4km 70°

This is one of six Reed Buntings exchanged with sites around Dunham Massey on the western outskirts of Manchester.

Reed Bunting

AHO2283 3 06/09/2021 Markham Vale, Derbyshire SK4571

R (M) 24/12/2021 Woolston Eyes No 1 bed, Warrington 80km 283°

Reed Bunting

AJR2424 4F 09/03/2022 Woolston Eyes Bed No3, Warrington

XF 22/03/2022 Grappenhall, Warrington SJ6487 1km 211°

Reed Bunting

AYL5360 6F 01/01/2021 Lostock Woodford, Poynton, Cheshire SJ9083

R 12/12/2022 Woolston Eyes Bed No 1, Warrington 25km 283°

Michael Miles on behalf of the ringing team (John Blundell, George Dunbar, Kieran Foster, Phil Guest, Rebecca Jones, Dan Owen, Margaret Rawlins and David Riley)



Migration Watch 2022

Visit 1

Participants: David Bowman, Sue Haddock and Dave Steel.

Day: Saturday

Date: 26/03/22 **Time:** 0630-1200 **Venue:** No.4 Bed

Weather: Red dawn staying bright and fresh all morning.

Highlights: Viewing over the splendour offered by this nascent wetland, which was already hosting a flurry of birds. A visit by the future of Woolston Eyes Nature Reserve, in the person of youthful Dan Owen and two other excellent young, keen birdwatchers.

Total: 846 birds noted.

Visit 2

Participants: David Bowman, Helen Allen, Dan Owen, Brian Baird and Dave Steel

Day: Saturday

Date: 14/05/22 **Time:** 0630-1200 **Venue:** No.4 Bed

Weather: Bright but with a cool southerly wind.

Highlights: Car problem/Binoculars forgotten/a bad week in work for one of us/a cooler sweep of wind that was discouraging...the negatives were seemingly tipping the scales until the Swifts carried positivity on their wings. Thereafter with such as Dunlin, Common Sandpiper and Garganey to note these ensured that the scales were more than balanced.

Total: 566 birds noted.

Visit 3

Participants: David Bowman, Helen Allen and Dave Steel.

Day: Saturday

Date: 27/08/22 **Time:** 0700-1200 **Venue:** No.4 Bed

Weather: High broken cloud, warming up by mid-morning.

Highlights: The fact that this was an impromptu 'Vis-Mig' simply induced by this rapidly evolving wetland, which seems to send skyward invitations to migrating birds, such as the 14 Black Tailed Godwit that swooped in at 0730. The cakes carefully chosen and shared by Helen. The conversations that 'may' have sorted the crisis our world is suffering, due once more to humanity's abuse of nature. **Total:** 985 birds noted.

Visit 4

Participants: David Bowman, Dave Steel, Helen Allen and Dan Owen.

Day: Saturday

Date: 10/09/22 **Time:** 0700-1200 **Venue:** No.4 Bed

Weather: Overcast but bright to the north and with a northerly breeze.

Highlights: Dan's delight in sharing his brand new 'mega' telescope, Helen's Moorish walnut and Nutella cake, a Peregrine with its kill and a close encounter with a Little Stint.

Total: 1,040 birds noted.

Visit 5

Participants: David Bowman, Helen Allen, Dan Owen (Dave Steel absent)

Day: Saturday

Date: 22/10/22

Time: 0700-1200

Venue: No1 Bed

Weather: Dry and bright

Highlights: A male Hen Harrier drifting south soon followed by an Osprey heading West. An impressive count of Fieldfare, three inquisitive Ring-Necked Parakeets possible attracted by the tub of Marks and Spencer's Chocolate cakes (other brands are available). My first ever absence on a vis-mig due to cataract op....hence the appearance of the Hen Harrier!

Total: 4,759 birds noted.

Visit 6

Participants: David Bowman, Helen Allen, Dan Owen and Dave Steel.

Day: Saturday

Date: 12/11/22

Time: 0800-0930

Venue: No.4 Bed

Weather: Clear sky to the north, cool south-westerly breeze.

Highlights: The awe-inspiring spectacle of peering up into a sky which was filled with at least seven thousand Pink-Footed Geese commuting from their roost on the Mersey to the plains of Cheshire. A call alerting us that a Penduline Tit had been caught by the ringers on No3 bed...the excitement equalling that felt when the geese passed overhead!

Total: 13,160 birds Noted.

Visit 7

Participants: Dave Bowman, Helen Allen, Dan Owen and Dave Steel

Day: Saturday

Date: 26/11/22

Time: 0800-1030

Venue: No.4 Bed

Weather: Clear sky with cool southerly breeze

Highlights: Yet another species added to our vis-mig list with the presence of Stonechat on this phoenix of a wetland created upon a 'Brownfield' site. Never cease to be amazed at how nature, with some nurturing, can be revived.

Total: 4,102 birds noted

Visit 8

Participants: David Bowman, Helen Allen, Dan Owen and Dave Steel.

Day: Saturday

Date: 03/12/22

Time: 0800-1030

Venue: No1 Bed

Weather: Clear sky with cool easterly breeze

Highlights: Flushing Jack Snipe during our 'leg-stretch' section of the vis-mig vigil. Interesting chats about the 'politics' of twitching. The food consumed...always a highlight!

Total: 5,061 birds noted.

Migration Watches 2022

Date	26/03/22	14/05/22	27/08/22	10/09/22	22/10/22	12/11/22	26/11/22	03/12/22
Time	0630-1200	0630-1130	0630-1200	0700-1200	0700-1200	0630-0930	0800-1030	0800-1200
Bed	No. 4	No. 4	No. 4	No. 4	No. 1	No. 4	No. 4	No. 1
Mute Swan	3	22	8	8	0	1	1	0
Pink-footed Goose	0	0	0	0	296	7000	20	250
Greylag Goose	25	0	0	30	0	70	0	4
Canada Goose	35	0	3	94	0	76	6	2
Common Shelduck	15	0	0	0	0	1	0	0
Wigeon	0	0	0	2	0	0	0	0
Gadwall	9	112	112	90	0	45	25	0
Garganey	0	1	0	2	0	0	0	0
Teal	44	0	14	244	0	150	600	0
Mallard	17	0	10	24	0	36	20	29
Northern Pintail	2	0	0	0	1	0	0	0
Shoveler	38	2	5	23	0	160	30	0
Pochard	9	0	0	0	0	0	0	0
Tufted Duck	9	0	0	0	0	24	9	15
Goosander	0	0	0	0	0	0	0	1
Pheasant	0	0	0	2	0	1	2	0
Black-Necked Grebe	14	0	0	0	0	0	0	0
Great Crested Grebe	1	0	0	0	0	0	0	0
Little Grebe	5	0	13	12	0	1	0	0
Cormorant	15	8	37	12	0	10	16	33
Little Egret	0	0	1	0	0	0	0	0
Grey Heron	5	1	2	1	0	1	0	1
Osprey	0	0	0	0	1	0	0	0
Marsh Harrier	0	0	0	1	0	0	0	1
Hen Harrier	0	0	0	0	1	0	0	0
Sparrowhawk	3	0	4	2	0	0	1	0
Common Buzzard	2	0	3	2	0	1	1	1
Kestrel	1	0	2	0	0	0	1	1
Peregrine Falcon	0	0	1	1	0	0	0	0

Date	26/03/22	14/05/22	27/08/22	10/09/22	22/10/22	12/11/22	26/11/22	03/12/22
Time	0630-1200	0630-1130	0630-1200	0700-1200	0700-1200	0630-0930	0800-1030	0800-1200
Bed	No. 4	No. 4	No. 4	No. 4	No. 1	No. 4	No. 4	No. 1
Water Rail	0	0	0	2	0	0	0	1
Moorhen	4	0	12	19	0	9	1	0
Coot	36	53	110	17	0	0	27	0
Oystercatcher	0	1	0	0	0	0	0	0
Little Ringed Plover	3	1	0	1	0	0	0	0
Ringed Plover	0	1	0	0	0	0	0	0
Lapwing	50	0	3	30	0	39	0	274
Sanderling	0	1	0	0	0	0	0	0
Little Stint	0	0	0	1	0	0	0	0
Dunlin	0	3	0	1	0	0	0	0
Common Snipe	24	0	11	8	0	2	1	8
Jack Snipe	0	0	0	0	0	0	0	9
Green Sandpiper	2	0	4	4	0	0	0	0
Common Sandpiper	1	3	0	1	0	0	0	0
Redshank	1	0	2	0	0	0	0	0
Black-Tailed Godwit	0	0	15	13	0	0	1	0
Black-headed Gull	209	0	7	11	0	225	555	1102
Common Gull	1	0	0	0	0	0	0	0
Lesser Black-backed Gull	46	0	32	50	0	10	3	53
Herring Gull	5	82	0	1	0	5	9	110
Great Black-backed Gull	2	0	1	0	0	29	6	28
Feral Pigeon	12	1	1	62	0	7	0	1
Stock Dove	3	0	10	1	0	6	0	53
Woodpigeon	49	0	101	223	1488	4585	2485	2790
Collared Dove	5	0	4	2	0	0	0	0
Swift	0	57	0	0	0	0	0	0
Kingfisher	0	0	0	3	0	0	0	0
Great Spotted Woodpecker	0	0	2	2	0	0	1	1
Skylark	0	0	1	0	20	1	0	53
Sand Martin	0	2	68	12	0	0	0	0
Swallow	0	1	49	61	0	0	0	0

Date	26/03/22	14/05/22	27/08/22	10/09/22	22/10/22	12/11/22	26/11/22	03/12/22
Time	0630-1200	0630-1130	0630-1200	0700-1200	0700-1200	0630-0930	0800-1030	0800-1200
Bed	No. 4	No. 4	No. 4	No. 4	No. 1	No. 4	No. 4	No. 1
House Martin	0	12	70	31	0	0	0	0
Tree Pipit	0	0	1	0	0	0	0	0
Meadow Pipit	0	0	1	18	9	12	3	46
Yellow Wagtail	0	0	3	0	0	0	0	0
Grey Wagtail	0	0	4	3	0	2	1	0
White/Pied Wagtail	5	0	10	5	0	3	1	3
Stonechat	0	0	0	0	0	0	3	0
Wren	0	0	0	1	0	2	1	1
Dunnock	0	0	0	3	0	1	1	2
Robin	0	0	1	0	0	0	1	5
Blackbird	1	0	0	0	0	2	2	4
Fieldfare	0	0	0	0	2107	273	52	41
Song Thrush	1	0	0	0	0	1	1	3
Redwing	0	0	0	0	0	20	35	25
Mistle Thrush	2	0	0	0	0	0	0	2
Cetti's Warbler	0	0	1	3	0	2	1	1
Blackcap	2	0	0	0	0	0	0	0
Common Whitethroat	0	0	3	0	0	0	0	0
Chiffchaff	5	0	17	11	0	0	1	0
Willow Warbler	0	0	6	0	0	0	0	0
Goldcrest	0	0	0	0	0	0	1	0
Long Tailed Tit	0	0	10	0	0	0	0	0
Willow Tit	0	0	0	2	0	0	0	0
Jay	2	0	2	2	0	1	0	1
Magpie	26	0	9	9	0	4	0	2
Jackdaw	55	0	3	5	0	0	2	4
Rook	0	0	9	0	0	0	0	0
Carrion Crow	33	0	22	12	0	0	1	32
Raven	0	0	1	0	0	3	0	3
Starling	0	0	67	325	691	227	110	3

House Sparrow	0	1	0	0	0	0	0	0
Chaffinch	0	0	2	1	98	60	43	28
Brambling	0	0	0	0	4	5	0	0
Greenfinch	0	0	0	4	1	1	0	0
Goldfinch	0	0	62	190	0	32	5	0
Siskin	3	0	0	0	27	1	1	2
Linnet	4	6	17	34	0	8	7	28
Lesser Redpoll	0	0	0	0	9	3	4	4
Bullfinch	0	0	2	0	0	0	2	0
Yellowhammer	0	0	0	0	3	0	0	0
Reed Bunting	2	0	13	6	0	2	2	0
Ring-Necked Parakeet	0	0	1	0	3	0	0	0
Totals	846	371	985	1740	4759	13160	4102	5061

David Steel

REPORT ON BREEDING WILLOW TITS

During 2022 breeding evidence was, again, extremely poor. Four nests were found (an increase of one compared with 2021) but one was considered to be a 'repeat'. Two nests were predated. Of the remainder one was successful, and the other hopefully successful. Despite regular monitoring throughout the breeding season, results were disappointing with many visits failing to produce any sightings or responses to playback. Compared with previous years, song was at a depressingly low ebb and it is suspected that, due to severely reduced numbers, birds may not be stimulated to proclaim territories.

No.1 Bed

In March a pair was seen at the Viaduct Pools and one possibly heard at the east end of the Reserve. In April two separate excavations were found at the Viaduct Pools and one resulted in nest-building but was later predated. On 9 May a lined nest was found, with possible egg(s) covered and on 27th it contained naked chicks being fed by the adults. Sadly, this was found predated on 8th June with classic woodpecker damage and the shallow cavity making easy pickings for Great Spotted Woodpecker. By December, the ringers reported that just seven had been ringed, one adult from a previous year, and six juveniles.

Despite regular visits to previous nest sites and haunts, other than just two brief calls, no other sightings or breeding evidence was found. It is regretful that, as a result of the tipping activity, much scrub has now been cleared from the west bank of the main pool, which in the past has held several nest sites.

No.2 Bed

This bed was more extensively monitored compared with the previous two years, but with disappointing results. Singles were heard along the southern bund, and also parallel to the Viaduct, but despite searches, no nest was found. It is particularly disappointing that, in scrub bordering the Ship Canal, which has produced three nests in recent years, no birds were seen or heard.

No.3 Bed

No nests were located on this bed. Up to three singing males were heard on occasion in March. Searches for nest site, however, were unsuccessful. During April one was in song near the Rotary Hide and, on a couple of further visits, brief calls were heard in this vicinity, but no evidence of breeding was found. At the end of the month, an extensive visit was made to known previous territories and nest sites. Despite playback and thorough searches, not one was located. They were evidently present, and may have bred on the bed, but were extremely quiet and unobtrusive.

The ringers reported that just 10 birds had been handled during the year. Two adults were ringed in previous years, one adult newly ringed and the rest were juveniles.

No.4 Bed

Up to three sightings were reported at the beginning of March. However, on regular visits just the odd bird was heard from the western and southern parts of the bed. Several visits drew a complete blank, particularly to the disappointment of a contingent from the RSPB on a visit in the middle of March.

One was watched excavating near the Sandpit Pond on 23 March. The nest was lined on 17 April and the female was incubating a clutch of nine eggs on 27th. On 9 May the nest was found predated by a Great

Spotted Woodpecker. There was a single hole drilled level with nest, which was empty and probably predated when it would have held small chicks.

During April singles were heard and seen on the edge of the southern woodland and also between the bends on the centre track. Trial borings were found at the western end of the southern woodland but these did not progress. Exhaustive searches were made (in difficult conditions) in the remainder of the woodland and also in the scrub in the north-east corner of the bed, but none were seen or evidence of breeding found.

In the latter part of April, brief song and calls were heard between the eastern part of the Loop and the river. Eventually, on 30 April, one was tracked to a nest, which was lined, on the north riverbank. On 9 May the female was incubating five eggs, with five fully feathered chicks on 27th. On 8 June the nest cavity had been completely ripped open by a Great Spotted Woodpecker, but there is a good chance they may already have fledged.

On 2 June a nest was found not far from the southern bund. The female was brooding at least five naked chicks. The nest hole was unobtrusive, being at the end of a broken, sloping stump and screened by vegetation. It was only 30 metres from the predated Sandpit Pond nest and, because of the late date, considered likely to be a 'repeat' by this pair. However, early in the season a male had been in song in this vicinity, in addition to the Sandpit Pond birds. On 17 June the nest held fully- feathered chicks and the cavity was intact and empty on 22 June, indicating a successful fledge.

Summary

Despite more extensive monitoring compared with the previous two years, based upon the lack of territorial song, number of sightings and unsuccessful searches for nest sites, the evidence strongly suggests that breeding success remains at the previous, precarious level. The decline has been steep, from an estimated 30 pairs in recent years to the possibility of just 10-12 pairs today. In addition, negative results from nearby areas such as Woolston New Cut and the Twiggeries Reserve, suggest that the population is not dispersing from the Eyes, or vice-versa. It can only be concluded that the outlook for this vulnerable species is still bleak.

Allan Rustell

BUTTERFLY REPORT

For the first time in three years, it was possible to monitor the whole Reserve throughout the year and thus reassess the status of butterflies at Woolston. It proved to be a reasonable year overall with some species seen in record numbers although others were somewhat disappointing.

The year started well with an early report of a Peacock on No.3 bed on 27 February and warm weather in the second half of March saw the appearance of Small Tortoiseshell, Comma, Brimstone and an early Orange-tip on 31st.

A temperature of 19°C on 25 March enabled the Butterfly Transect to be walked and four butterflies of three species were recorded. An excellent total of 71 Small Tortoiseshells was noted towards the end of the month. Temperatures reverted to normal during April when 67 Peacocks were present. Orange-tip had a good year with a maximum of 66. Other significant records were of the earliest ever sightings of two species; Large White on 20 April and Large Skipper on 27 May.

The summer was notable for record counts of Holly Blue and Ringlet with the first ever June sighting of the latter species. Other butterflies to perform well were Small and Green-veined Whites with maximum totals of 133 and 80 respectively. Other butterflies of high summer did less well. Purple Hairstreak proved particularly elusive and was only found on two dates with a maximum of eight present. Common Blue seems to have had a resurgence after a few very poor years and a total of 103 was encouraging. The expected second brood of Peacock appeared late and in very small numbers.

Red Admiral had a reasonable year with a maximum of 43 in mid-September while Comma peaked at 22 around the same time. Speckled Wood had a good year and late August saw just over a hundred across the Reserve. One of the highlights came on 21 September when a Clouded Yellow was found on Butchersfield Tip.

The final record of the year was of two Red Admirals on 30 October.

The Butterfly Transect was monitored every week from April to the end of September and as always I am grateful for the support of Derek Britch and Les Jones for covering my absences on holiday and to Derek for regularly monitoring the river to the north of Nos.1 and 2 beds. The Canal Track portion of the transect has been mowed in order to prevent the encroachment of brambles and encourage the spread of Birds-foot Trefoil.

This Report would be incomplete without the sightings of fellow wardens and permit holders whose contributions enable a full record of numbers and distribution across what is a very large site.

Thanks also go to Rupert Adams the Cheshire Butterfly Recorder who is able to provide a wider context in which the Woolston Eyes records can be considered. County-wide data confirms that Woolston Eyes remains one of the most important sites for many of our more common species, in particular Common Blue and Gatekeeper.

SPECIES ACCOUNTS

Small Skipper

Thymelicus sylvestris

The first sighting was of four on 22 June, a fairly typical date. It was not a good year for this inconspicuous and often overlooked species however and although there were regular reports until mid-July, a maximum count of eleven was somewhat disappointing. In spite of some attempts to find the very similar Essex Skipper which is now beginning to colonise Cheshire, none were identified. The final record was on 13 July and butterflies were only reported on six dates during their flight period.

Large Skipper

Ochlodes sylvanus

One on Butchersfield Tip on 27 May was the earliest ever record of this species at Woolston. No less than seven were reported from No.3 bed on 21 June, the highest total since 2017. Most records were of one or two however and the flight period ended with one on No.1 bed on 10 July.

Clouded Yellow

Colias croceus

It is always a delight to see this rare migrant at Woolson and one was found on Butchersfield Tip on 21 September where it was nectaring on Buddleia. This is the first record of this attractive butterfly since 2014 and one of only three Cheshire records this year.

Brimstone

Gonepteryx rhamni

It was an excellent year for this striking butterfly. The first was on No.1 bed on 16 March and this was followed by reports from No.3 bed on 25th and 27th when three different individuals were seen. April saw reports of two on No.3 bed on 14th and 16th and four on No.2 bed the following day. Singles were present on five further dates in late April and May from various parts of the Reserve with the final sighting on 28 May. There were three records of the summer brood which is always less numerous; two were on No.4 bed on 16th July, a female was found on No.1 bed on 3 August and the last record was of one on No.4 bed on 8 August. This was probably the best year ever for this species at Woolston with a maximum of six present in mid-April.

Large White

Pieris brassicae

One on Butchersfield Tip on 20 April was the earliest ever for the Reserve and the start of a slightly above-average year for a species which is not usually present in large numbers. There were no further records until 10 June. On 16 July four were present with five around on 7 August of which four were on Butchersfield Tip. Maximum numbers occurred between 10 and 19 September when eleven were present across the Reserve and the final sighting was on 24 September. Most records this year were from the eastern end of the Reserve. A recent article in the Cheshire Branch of Butterfly Conservation newsletter by Peter Hardy suggested that Large Whites may be over-recorded due to difficulties in distinguishing them from Small and Green-veined Whites. I have no reason to suppose that this is happening at Woolston but it is a reminder to always try to confirm identity rather than judge by apparent size alone.

Small White

Pieris rapae

The first was noted on 13th April and small numbers were recorded until the end of the month. On 28 May 19 'whites' were on No.4 bed, and these were all thought to be Small Whites. A Reserve total of 11 between 20 and 25 June was the start of the second brood and numbers increased through July with 52 present by mid-month. The year maximum was at the end of August when a series of visits produced a Reserve total of 133, which represents an above-average year for this often over-looked species. Of these, nearly half (61) were on Butchersfield Tip with over 20 on each of Nos.1, 3 and 4 beds. Reasonable numbers persisted into September when counts of 45 around mid-month, and 16 on 20th were significant. The last sighting was of one on the Butterfly Transect on 28 September.

Green-veined White

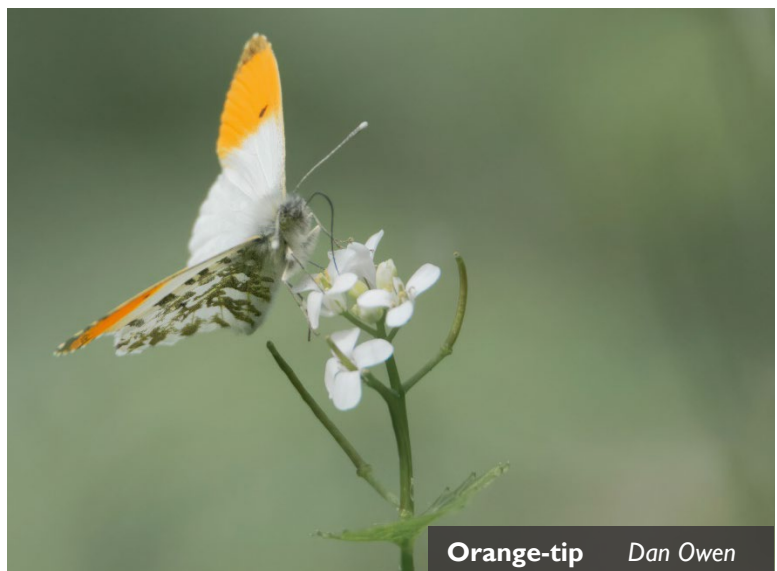
Pieris napi

The difficulties of distinguishing between the various 'whites' which are often seen in flight and/or at a distance are well documented and make any assessment of numbers an estimate. Bearing this in mind this was a good year for this attractive species. The first was found on 13 April, a relatively early date in a year when many species emerged early due to favourable weather conditions. About 50 were present by the end of the month. On 5 May 14 were recorded at the eastern end of the Reserve but there were no June sightings. The second brood emerged in early July when about 80 were found during a series of surveys between 2nd and 10th. This proved to be the highest count of the year and the same as in 2019, the last year in which systematic recording took place. Of these about half were on No.1 bed and Butchersfield Tip. Good numbers continued into August with 44 on 6th and 38 at the month end. By mid-September 14 were still present and the final count was of eight on 21 September, the latest date since 2013. It is likely that some were still present after that date, but no further surveys took place.

Orange-tip

Anthocharis cardamines

Another species to emerge early this year, a male was found on the south bank of No.3 bed on 31 March, only the third March record at Woolston. There were no further sightings until 13 April when three were present. Numbers increased rapidly and by 20 April 46 were found across the Reserve. A series of visits between 20 and 29 April produced the year maximum of 66, the second highest ever total but well short of the record 151 in 2019. Of this year's total 23 were on No.4 bed and the rest fairly evenly distributed. A survey in the first week of May produced 22, of which 14 were on No.2 bed and the river but not all the Reserve was walked at this time. Numbers then declined until the final sighting, a late record of one on the Canal Track on 3 June.



Orange-tip Dan Owen

Purple Hairstreak

Favonius quercus

Always elusive and often difficult to see as they flit about in the Oak canopy in early summer evenings, this year was particularly problematic. Four evening surveys took place from early July to the beginning of September and butterflies were only seen on one occasion, namely 9 July, when Derek Britch and I found seven on the south bank of No.3 bed. In spite of sometimes perfect conditions the other surveys failed to find even a single butterfly. Kieran Foster reported what was almost certainly an additional butterfly on 29 July, making a year total of eight. Surprisingly, none were found along the Canal Track where mature Oak trees offer suitable habitat. Nevertheless, the year maximum was reasonable and indicates that this species is well-established on the Reserve.

Small Copper

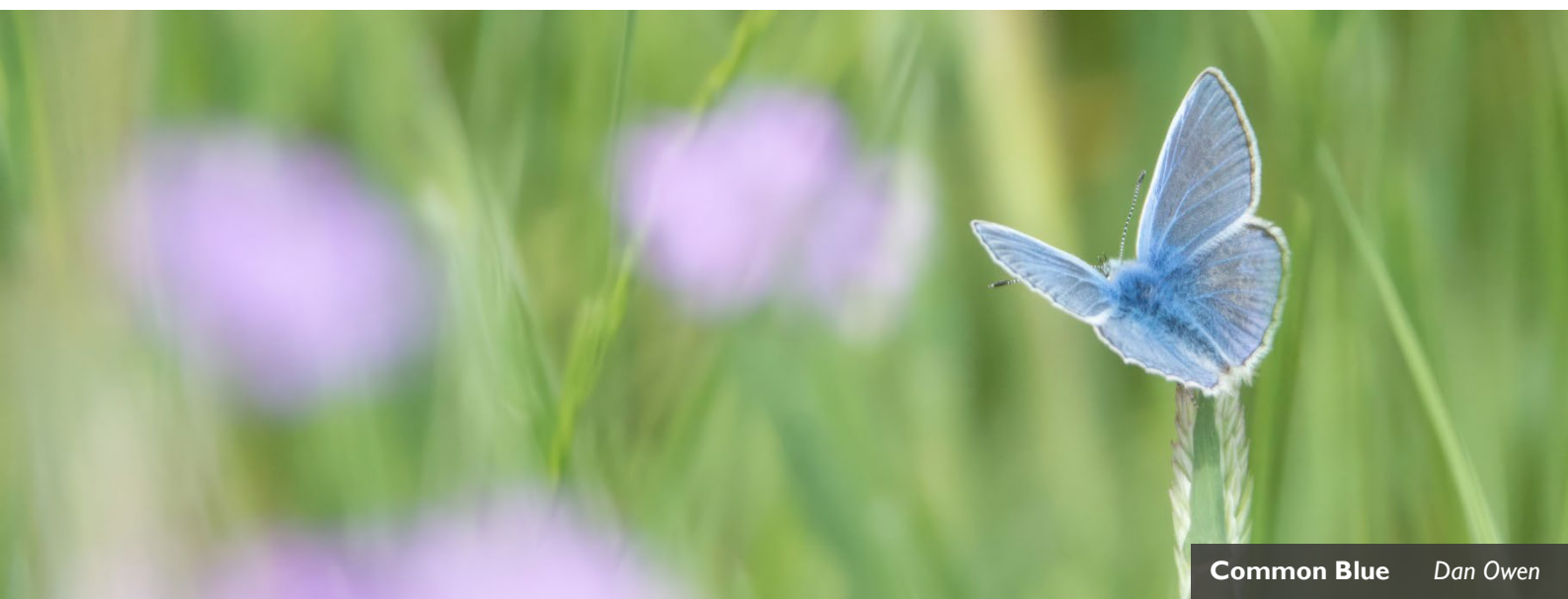
Lycaena phlaeas

This species has not been seen in good numbers for several years and 2022 was no exception. Only seven records were received, most from No.1 bed with a maximum of two on 16 September. The first sighting was of one on No.2 bed on 18 May, followed by one near the footbridge at the entrance to No.3 bed on 11 July. A further record of one came from No.4 bed on 8 August. All subsequent sightings were from No.1 bed where John Blundell and Dave Riley reported singles on 17 and 26 July, two on 16 September and the final record of the year, one on 21 September.

Common Blue

Polyommatus icarus

After a couple of poor years, it was encouraging to see a significant recovery in 2022. The first were seen on 18 May, an early date, when three were on No.2 bed and 15 on No.1. Reasonable numbers were reported during the rest of May. The first brood peaked at the beginning of June when 22 were found during a survey of the eastern end of the Reserve. Small numbers remained throughout June and July and the second brood, which is usually more numerous than the first at Woolston, emerged at the beginning of August. A series of visits between 6 and 10 August resulted in a Reserve-wide total of 103, an excellent number compared to the previous two years. As usual the vast majority (74) were on the northern section of No.1 bed where emerging vegetation is providing excellent habitat. The others were distributed as follows: six on the rest of No.1 bed, 12 on Butchersfield Tip, four on No.2 bed and six along the river. It was encouraging to find a female on the Transect throughout August, which is evidence that annual mowing of Brambles is allowing Birds Foot Trefoil to re-establish itself. Later in the month there were a couple of sightings of singles on No.4 bed which gives hope for the future in that area. A survey of Butchersfield Tip on 19 August produced 34 which could indicate that the year's maximum in early August could be an under-estimate. Around the end of August and early September 25 were still present and a successful year ended with one on No.1 bed on 17 September.



Holly Blue

Celastrina argiolus

It was a record year for a species which is normally seen only in ones and twos. In common with many species there was an early sighting on 20 April when one was on Butchersfield Tip. Singles were reported from various parts of the Reserve on a further five dates until 7 May. The second brood emerged on 10 July when three were present. Further records during July culminated in a record total of 11 at the end of the month with four on the Butterfly transect alone on 31st. Two were on No.3 bed on 6 August and the year ended with one on the Canal Track on 20th.

Red Admiral

Vanessa atalanta

A single on 21 May was the first of a good year for this migrant species, and this was followed by further reports of singles to mid-June. Between 22 and 25 June, 11 were found across the Reserve. The next count of significance was of 14 between 31 July and 3 August. A total of 26 was present towards the end of August. As is often the case, maximum numbers appeared in mid-September. A series of visits between 10th and 19th resulted in a total of 43 which is the third highest ever at Woolston. The distribution was as follows: 14 on Butchersfield Tip, three on No.1 bed, four on No.2 bed, seven on No.3 bed, nine on No.4 bed and the Canal Track and six on the river. An interesting sighting was of eight together with four Commas within an area of two square yards at the top of Butchersfield Tip on 16 September. There were no other high counts and a successful year ended with two on No.4 bed on 30 October.



Painted Lady

Vanessa cardui

This migrant is usually seen only in small numbers and this year was no exception. The first was seen on 19 May and there was a further sighting of what could have been the same butterfly on No.4 bed a week later. Two were on the butterfly transect on 3 June and there were further records of singles until 23 June. There was then a gap until 2 August when one was on No.4 bed. There were further reports, all of singles, from various parts of the Reserve during August. The year's maximum was of four on the northern section of No.1 bed on 28 August. The year ended with singles on No.1 bed on 17 and 21 September.

Small Tortoiseshell

Aglais urticae

It was a mixed year for a species that has been in decline in recent years, with good numbers in spring but a disappointing summer brood. One on 15 March started the year and numbers rapidly increased as warm sunny weather continued to the end of the month. Reports of 10 and 17 from No.1 bed set the scene for a year maximum of 71 between 25 and 27 March. This total was for the whole Reserve with the exception of Butchersfield Tip and the river, which were not surveyed at this time. The distribution was as follows: No.1 bed ten, No.2 bed 14, No.3 bed 19 and No.4 bed 28. This is the highest total since 2014 and a minimum given the areas not covered. April saw a count of 23 on 20th but thereafter there were no totals in excess of the ten found in the third week of June. Nine were on Thistles in the centre of No.4 bed near the new viewing platform on 23rd. Numbers remained disappointing through July and August although a survey of nearby Rixton Moss on 5 July produced a total of 23. The year ended with a single on No.1 bed on 17 September.

Peacock

Aglais io

The fortunes of this species closely mirrored those of Small Tortoiseshell with good numbers in spring and a disappointing summer brood. This pattern was reproduced in the rest of Cheshire. As both species have a similar life-cycle, hibernating over winter to emerge in March – April with a further brood emerging in mid-summer, this is perhaps unsurprising. An early record of one on No.3 bed on 27 February was followed by further sightings from mid-March onward and a total of 20 was noted during the week ending 27 March. Peak numbers occurred towards the end of April when a series of visits between 20th and 29th resulted in a Reserve-wide count of 67. Of these, eight were on No.1 bed, five on Butchersfield Tip, 25 on No.2 bed, 15 on No.3 bed, 11 on No.4 bed and three along the river. Only low numbers were then recorded until the end of the spring sightings on 12 June. The summer brood was late and very disappointing with no counts in double figures, the highest being of six on 6 August. The final report was of one on 28 August.

Comma

Polygonia c-album

An above-average year began on 19 March when singles were found on Nos. 3 and 4 beds. Small numbers were seen on two further dates in March and the last spring sighting was of four on 20 April. The summer brood emerged on 22 June and by the end of that month about 14 were present across the Reserve. Early July saw a total of 19 and the year maximum occurred, fairly typically, in mid- September with a Reserve-wide count of 22 between the 10th and the 19th. Of these, four were in a small area of Butchersfield Tip together with eight Red Admirals. Nine were still present at the end of that month and the year ended with one on No.4 bed on 8th October.

Speckled Wood

Parage aegeria

Another species to enjoy a successful year, this was only the sixth time since systematic recording began twenty years ago that a total in excess of a hundred has been recorded. The first of the year were seen on 16 April and four days later a survey of the whole Reserve produced a total of 18. There were only single-figure counts for the rest of spring and early summer. During the period 20 to 25 June, 24 were present and similar numbers remained into August with 38 around mid-July and 37 at the beginning of August. Peak numbers occurred at the end of August with 82 around the 20th rising to 106 by the month end. They were fairly evenly distributed across the Reserve, with 18 on Butchersfield Tip, 17 on No.1 bed, 27 on No.2 bed, 13 on No.3 bed and 22 on No.4 bed. A further nine were found along the river. By mid-

September numbers had fallen to 31, and 16 were counted between 20th and 28th. No further records were submitted.

Gatekeeper

Pyronia tithonus

An early emergence on 28 June when four were on Butchersfield Tip, and one on No.1 bed was the start of a reasonable season for a species that has been in decline for several years. This is a species of rough grassland and changes in habitat at Woolston have been a factor in the reduction in numbers. Typically, there was a rapid increase in early July and the year maximum occurred in mid-month. A series of surveys between 13 and 16 July produced a Reserve total of 298 which were distributed as follows: Butchersfield Tip 43, No.1 bed 40, No.2 bed 46, No.3 bed 27, No.4 bed 89, and 53 along the river. No.4 bed was the most productive area which again is fairly typical. The usual decline in late July and August saw a count of 87 on 6th August and the final report was on 28th.

Meadow Brown

Maniola jurtina

This was not a good year for this butterfly of high summer and the year's maximum was the second lowest since systematic recording began in 2003. The first were seen on the fairly early date of 10th June and other significant totals for that month were eight on No.1 bed (18th) and 14 on No.3 bed (20th). Surveys between 20 and 25 June resulted in a Reserve total of 61 and the highest count of the year was in early July when 86 were found across the Reserve. Of these more than half (48) were on No.1 bed where the recycling area was particularly productive with 46 seen. A further 12 on Butchersfield Tip confirmed that the eastern end of the Reserve was the stronghold of a species that favours rough grassland. By mid-July, 64 were still present but numbers decreased by the first week in August when only 34 remained. The decline continued and the final sighting of a disappointing year was of one on the Butterfly Transect on 3 September.

Ringlet

Aphantopus hyperantus

This species has been spreading north and westwards throughout Cheshire in the last 10 years or so and was first recorded at Woolston in 2014. Since then, in spite of some blank years, it has established a tenuous foothold on the Reserve. It was very encouraging, therefore, that this was the best ever year for a species which is not always easy to distinguish from Meadow Brown unless close up views are obtained. The first was seen on the very early date of 20 June on the Butterfly Transect, and this was the first ever June record of a species whose flight period is more or less confined to July. Three further June sightings followed including one on No.2 bed on 28th and up to three along the river (26th and 30th). On the latter date a pair was seen mating. Between 2 and 13 July, a minimum of eight were found; one on the Butterfly Transect, one on No.1 bed, two on No.4 bed including one in the Sand Pit Pond area, one on the Canal Track and three along the river. This is an absolute minimum as a further two possible Ringlets were on No.4 bed, but it was not possible to confirm their identity. Even more encouraging than the actual numbers was the fact that they were found on all four beds which gives hope of a further expansion in the future. There were no sightings after 13 July.

David Hackett

DRAGONFLY REPORT

After a good beginning, due to the often warm and sunny weather from May onwards, the abundance of the majority of species appeared to decline fairly quickly, later in the summer and early autumn. The season began on 5 May, when the first Azure Damselfly was spotted on No.4 bed, followed on 7 May, by a freshly emerged Common Blue Damselfly. A Broad-bodied Chaser on No.3 bed, on 12 May, was the first dragonfly of the year. On 14 May, a pair of copulating Blue-tailed Damselflies were on No.4 bed, where an early Black-tailed Skimmer was seen on 19 May. Two days later on 21 May, several Four-spotted Chasers appeared on No.4 bed and an Emperor Dragonfly was discovered on No.1 bed. Red-eyed Damselflies were present below the footbridge to No.3 bed, from 28 May. The first Common Darter was recorded on 4 June, on No.4 bed. On 18 June, a single Large Red Damselfly was present on No.1 bed and a single Banded Demoiselle was on No.3 bed. On 21st June, an Emerald Damselfly was found on No.3 bed, where Brown Hawkers appeared, from 25 June. The first Ruddy Darters were present on No.3 bed, from 9 July. The last dragonflies to appear were the Migrant Hawkers from 16 July and Southern Hawkers from 21 July. In total, sixteen species were recorded, which is average, but it is concerning that only one or two singles were logged for a couple of species.

The warm conditions in the spring obviously suited several of the damselfly species. Compared with the previous year there was a sizeable increase in the abundance of Azure Damselfly, Common Blue Damselfly, Red-eyed Damselfly and notably Blue-tailed Damselfly. The highest numbers for these were recorded from early May until the end of July, and breeding activity was observed on a number of occasions. Although there were a few more sightings of Emerald Damselfly this year, numbers still remain in single figures. Sadly, there were just two records of Banded Demoiselle and only one of Large Red Damselfly, both of which appear to have either declined or been under-recorded in recent seasons.

Although there were some earlier than usual sightings of Black-tailed Skimmer, Emperor Dragonfly and Migrant Hawker, all of these were recorded in about average numbers. An increased number of Brown Hawkers were present on No.3 bed, where they are often prone to predation from the visiting Hobbies. Once again, a small number of Southern Hawkers were recorded from late summer onwards, mainly on No.4 bed. Despite favourable conditions, there were less records of both Broad-bodied and Four-spotted Chaser, although it was encouraging to have some from No.4 bed this year. During July and August only a relatively small number of Ruddy Darters, were recorded. Common Darters were as usual present until the autumn, but the numbers recorded were below the previous year. It was disappointing not to have any sightings of Black Darter, after having two records last year. Similarly, there were no records again of Common Hawker, although both of these species are considered to be scarce visitors to the Reserve. On a more positive note, breeding was confirmed for Black-tailed Skimmer on No.1 bed. Also, ovipositing females of Brown Hawker, Emperor Dragonfly, Four-spotted Chaser and Common Darter were all noted, which hopefully will lead to the emergence of adult dragonflies in due course.

Once again, surveys were completed from May until September, along the Dragonfly Transects on Nos.1 and 3 beds, for the Carbon Landscape Project. Woolston's records were also submitted throughout the season to the County Dragonfly Recorder. As always, I am grateful to David Bowman for including his records on the Group website etc. and to Dave Hackett, Dan Owen and Helen Wynn for their contribution to the records.

SPECIES ACCOUNTS

Emerald Damselfly

Lestes sponsa

Despite this being a fairly common and widespread metallic-green damselfly, very few have been recorded on the Reserve for several years. During the current season there were five sightings, beginning with one on No.3 bed on 21 June. Along the south bank of the same bed, two were then present on 25 June. However, it was encouraging to have records from No.4 bed this year, where singles were reported on both 30 June and 21 July. The last sighting was on 27 August, when two were recorded during a survey of the west pools on No.1 bed.



Azure Damselfly

Coenagrion puella

The first report of this common and widespread species came from No.4 bed on 5 May which was several days earlier than usual. Small numbers appeared during the following week, before 40 were recorded on 18 May on No.3 bed and at least 25 were present on No.4 bed on both 19 and 21 May. When a survey was completed on No.1 bed on 21 May, 64 were recorded. Numbers peaked on 28 May, when 143 were present along the south bank of No.3 bed, including numerous ovipositing pairs below the footbridge. Across the Reserve there were several double-figure counts in June, with a maximum of 67 on 22 June on No.3 bed. Following this only small numbers were noted during July. The last sighting was on 27 July, when two singles were present on the south bank of No.3 bed. Overall, more than 400 were recorded, which was above the recent average.

Common Blue Damselfly

Enallagma cyathigerum

Although this widespread damselfly is never as numerous at Woolston as the previous species, almost 300 were recorded this year, which was better than average. A freshly emerged teneral on No.4 bed, on 7 May, was the first of the year. On 19 May at least 20 were reported on the same bed whilst on 21 May a similar number were present on No.1 bed. Numbers increased during June, with at least 20 on No.1 bed, on 11th, 66 on 16th and 50 on 18 June. Double-figure counts were also recorded in June on Nos.2 and 3 beds, but by the end of the month very few were present there. During a survey on No.1 bed on 14 July, 39 were recorded, with 17 on 27 July on No.3 bed. The last sighting was on 30 July, when four were below the footbridge to No.3 bed, including a copulating pair. Unusually, there were no records in August.

Red-eyed Damselfly

Erythromma najas

The small population of this robust damselfly occurs almost exclusively along the Oxbow to the south of No.3 bed. The first sighting was on 28 May, when five were present including a tandem couple. On 11 June, nine were reported increasing to 26 on 21 June. During a survey on 22 June, 19 were recorded and two pairs in tandem appeared to be ovipositing. After this there were three single-figure counts towards the end of June and early July. The only record away from No.3 bed was at the Weir Basin, where three were present on 11 July. On 27 July 23 were noted along the Oxbow. The last two records were of 12 on 6 August and eight on 20 August.

Blue-tailed Damselfly

Ishnura elegans

It was another good season as far as numbers of this common and widespread species was concerned, with over 600 being recorded across the Reserve. A report of a copulating pair on No.4 bed on 14 May was the first of the year. Also on No.4 bed, on 21 May, around 100 were present, whilst 61 were recorded on No.1 bed the same day. During the next few weeks small numbers were along the Canal track and also on Nos.1, 3 and 4 beds. A maximum count of 117 was recorded during a survey at the west pools on No.1 bed on 16 June. During the rest of June and early July, there were several double-figure counts on Nos.3 and 4 beds. There was just one record this year from the Weir Basin, where one was noted on 11 July. A few days later on 14 July, a minimum of 70 was present around the pools on No.1 bed, including a few copulating pairs. All of the remaining records came from the south bank area of No.3 bed, where six were present on 27 July, four on 30 July and two on 20 August.

Large Red Damselfly

Pyrhosoma nymphula

This distinctive red and black damselfly, which emerges in early spring, breeds in a wide range of wetland habitats. Despite being a common species, there have only been single-figure counts at Woolston during the past few seasons. Sadly, this trend continued again this year, with just one being reported on 18 June on No.1 bed.

Southern Hawker

Aeshna cyanea

This large dragonfly is a solitary and inquisitive species which sometimes hovers close to an observer, before continuing to hawk insects above the tree canopy. Only a very small number are recorded annually on the Reserve and the 10 seen this year was slightly above the recent average. The majority of these were on No.4 bed, beginning with singles on 21 and 26 July. Also on No.4 bed, a single was reported on 6 August, followed by three on 15 August and another one on 25 August. Singles were present on No.3 bed,

on 1 September and on No.4 bed on 3 September. The last record was on 13 October, when one was present on the south bank of No.3 bed.

Brown Hawker

Aeshna grandis

The majority of sightings of this distinctive amber-winged dragonfly were once again on No.3 bed. The first of these was on 25 and 30 June, with five present on both dates. On 2 July one was in front of the Morgan Hide, whilst another was patrolling below the footbridge. On 8 July, “several” were recorded by a permit holder in the logbook. The following day, nine were present on the bed and one was also on No.4 bed. The highest numbers occurred on 27 July, when 10 were recorded during a survey along the south bank of No.3 bed, including an ovipositing female and three were hawking insects along the Canal track. Despite rather damp and overcast conditions on 30 July, three were seen in flight on No.3 bed. A similar number was also present on the bed on 20 August. The last two sightings were at the west pools on No.1 bed, where six were recorded on 27 August and one was present on 17th September.

Common Hawker

Aeshna juncea

There were no records again of this large dark-coloured species, which has become a scarce visitor to the Reserve. It is a wary dragonfly and is usually present around acidic bog pools and moorland habitats. The most recent record was a single in July 2014.

Migrant Hawker

Aeshna mixta

This smaller hawker species occurs from late summer onwards and often perches low on vegetation, affording close views. The first of the year was a freshly emerged insect on 16 July, which was a comparatively early Reserve record for this species. The next sighting was not until 20 August, when three were present along the south bank of No.3 bed. At the Loop of No.4 bed, two were noted on 25 August, followed by nine on 27 August at the west pools on No.1 bed. At the beginning of September, small numbers were present on both Nos.3 and 4 beds. A maximum count of 13 was made during a survey along the No.3 bed Dragonfly Transect on 14 September with a copulating pair noted. Numbers declined after this date with just two singles being recorded, along the Canal Track and on No.1 bed, on 17 September. However, two were present on No.4 bed on 6 October, whilst singles were spotted on Nos.3 and 4 beds on 8 October. The final sighting was also on No.4 bed, where one was reported on 15 October.

Emperor Dragonfly

Anax imperator

It was a fairly good year for records of this distinctive large hawker, which breeds in a variety of well vegetated ponds, lakes and canals. As usual the majority of records were of patrolling males, but the first of the season was a female at the pools on No.1 bed, on the comparatively early date of 21 May. One was reported at the same location on 28 May and a male was patrolling over a pool on No.4 bed, on 4 June. At the pools on No.1 bed, three were reported on 11 June and then on 16 June a maximum count of nine was recorded on the bed, including an ovipositing female. During the rest of June, only odd singles were spotted on Nos.1, 3 and 4 beds. On 9 July, two were reported on No.4 bed and on 14 July four males were recorded on No.1 bed. The final sighting was on 27 July, when a male was observed patrolling the Oxbow, below the footbridge to No.3 bed.

Broad-bodied Chaser

Libellula depressa

The medium-sized Broad-bodied Chaser emerges in the spring and early summer period and is often encountered at newly created ponds and shallow lakes. Unsurprisingly, the highest numbers this year were recorded at the recently created pools on the No.4 bed wetland. The first of the season, however, was a single on No.3 bed, on 12 May. Two days later peak numbers were reported on No.4 bed, where 15 were present. A male was seen catching and eating prey in the car park, by No.3 bed on 18 May. On 21 May, nine were reported on No.4 bed and two were recorded at the west pools on No.1 bed. The remaining records were all in June, beginning with a male hunting insects by the South Screen on No.3 bed on 2 June. At least four were present on No.4 bed, on 4 June. The last record was also on No.4 bed, where two were noted on 25 June.

Four-spotted Chaser

Libellula quadrimaculata

This more common and widespread chaser also appears from the spring onwards and is often seen perched on marginal vegetation at ponds and other still water habitats. Similar to previous years, the majority were found on No.1 bed, but it was encouraging to have two early records from No.4 bed. On 21 May, seven were reported on No.4 bed and then on 4 June five were present, including an ovipositing female, with a male in close attendance. The remaining records were all from No.1 bed, beginning with seven on 11 June. When a survey was completed at the west pools on 16 June, a maximum count of 18 was recorded, including three egg-laying females and a copulating pair. Strangely, just two days later on 18 June, only two were present at the same pools. The only other sighting was also at the west pools, where two were present on 16 July.

Black-tailed Skimmer

Orthetrum cancellatum

This is a very active medium-sized dragonfly, which flies fast and low over the water and then rests on bare earth or stones around the water's edge. Although there were records from across the Reserve, the highest numbers were found at the shallow pools on the east cell of No.4 bed. The first of these was an early single on 19 May. Two days later on 21 May, a good count of 17 was reported on the same bed. The next sightings were on 16 June, when odd singles were present on Nos.1 and 2 beds. Proof of breeding was confirmed on 18 June, when an emerging adult and exuvia were spotted on No.1 bed. After this, five were reported on No.4 bed on 25 June, with at least 15 there on 30 June and four on No.3 bed. There were reports of "plenty" on No.3 bed on 17 July and of a single on No.4 bed, on 26 July. The last record was also on No.4 bed, where five were present on 18th August.

Black Darter

Sympetrum danae

Sadly, there were no reports of this small dragonfly, which is usually found around acidic bog pools and moorland habitats. Although it is regarded as a rare visitor to the Reserve, it was disappointing, since there had been two separate records, during August 2021. Prior to this the previous sightings were of singles on No.1 bed, in 2013 and 2017.



Ruddy Darter David Bowman

Ruddy Darter

Sympetrum sanguineum

The breeding habitat for this small darter includes well-vegetated ponds and sluggish rivers close to woodland. In recent seasons only small numbers have been recorded, mainly at the west pools on No.1 bed or along the riverbank underneath the footbridge to No.3 bed. The first of the year was on 9 July, when five were present on No.3 bed. On 14 July, a single was recorded at the west pools on No.1 bed. The next sightings were all along the lower south bank of No.3 bed, where three were spotted on 27 July, a single on 5 August and seven on 20 August. The last record was on No.1 bed on 27 August when four were noted during a survey at the west pools.

Common Darter

Sympetrum striolatum

As usual there were records of this very common and widespread species from across the Reserve, but the numbers were less than half that of the previous two years. The first of the season was a single on No.4 bed on 4 June. On 18 June, at least six freshly emerged teneral were spotted at the pools on No.1 bed. However, during the rest of June only five were reported from No.4 bed. At the beginning of July, odd singles were spotted on No.3 bed. On 14 July, five were recorded at the west pools on No.1 bed, where two females were ovipositing on 16th July. There were just a few single-figure counts on Nos.3 and 4 beds during August, before 12 were present on No.4 bed on 25 August. On 27 August, 21 were recorded on No.1 bed, including ovipositing pairs. On 1 September, there were reports of 17 on No.4 bed and 11 on No.3 bed. Shortly afterwards, 14 were counted on No.4 bed but only four were present on No.3 bed on 14 September. The last double-figure count was on 17 September, when 16 were on No.1 bed and along the Canal track. During October, there were only a few single-figure counts on No.4 bed. The final sighting of the season was on 1st November, when one was seen along the north bank of the River Mersey, opposite No.1 bed.

Brian Baird

INVERTEBRATE SURVEY AT WOOLSTON EYES SSSI – 2022

INTRODUCTION

During 2022 the author carried out a brief invertebrate survey on No.3 bed at Woolston Eyes SSSI. This was done using volunteer effort as part of a scheme called “Green Letter Days” that the author’s employer, Natural England allow, to enable NE staff to participate in work to support nature conservation and conservation organisations. Though Woolston Eyes SSSI is designated for its bird interest only, there is the potential for invertebrates to be identified in their own right as having potentially important assemblages during this time of biodiversity crisis, where they are currently unrecognised.

METHODS & MATERIALS

A Malaise trap (Fig.1) was set up on No.3 bed (Fig, 2) and left over the following time periods – 06/06/22 to 15/06/22 and 04/07/22 to 18/07/22. It acts as an insect flight interception trap and collects and preserves the catch. Sweep netting was also undertaken on visits to set up and take down the trap, and casual records of easily identifiable species noted. The weather was a little mixed during the June survey, but hot during the July survey. Identification was carried out by the author, Nick Button, Krisz Fekete, Vicky Gilson, Keith Fowler, and Peter Chandler.



Figure 1 – Malaise trap set up along scrub edge on Bed No.3, Woolston Eyes SSSI (Pete Boardman)

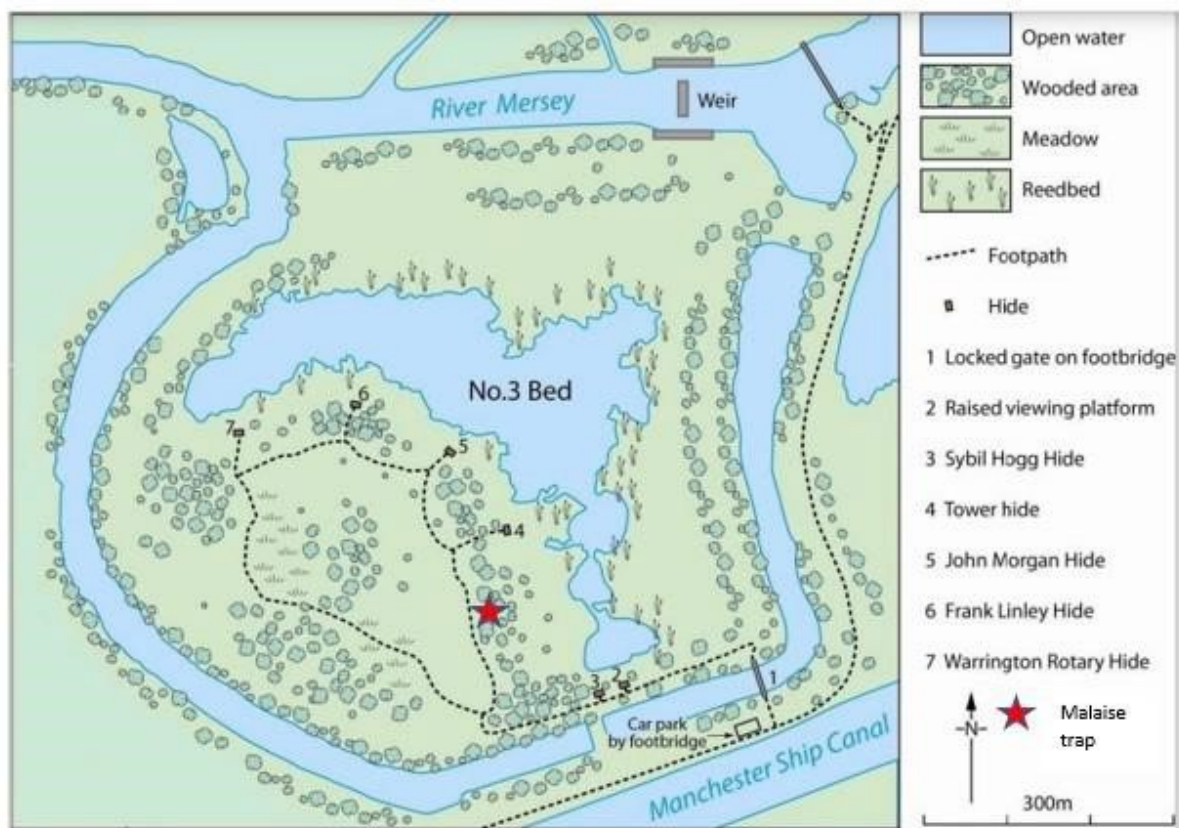


Fig. 2. Location of Malaise trap on Bed No.3.

RESULTS

A total of 195 species were identified, including one species noted as new to Great Britain. This was a species of *Glischrochilus* beetle (Fig. 3), which belongs to the Nitidulidae or sap beetles, and was only known previously from Eastern Europe. The species specifically isn't mentioned here, as an article is being prepared for publication in *The Coleopterist* and should not be prejudiced until formally published. The largest group identified were flies (76), followed by beetles (36), true bugs (36), butterflies and moths (14), bees, wasps, sawflies, and parasitic wasps (12), spiders and harvestman, (12), damselflies and dragonflies (3), springtails (2), and singletons of earwing species, barkflies, molluscs, and caddisflies. A full list of species encountered are listed in the Appendix of this report



Fig. 3 – *Glischrochilus* sp. (<https://baza.biomap.pl/pl/db>)

Interesting species

Coleoptera (Beetles)

Agelastica alni Alder Leaf Beetle – formally nationally rare but almost ubiquitous where there is alder.

Anaspis thoracica – a nationally scarce silk beetle associated with flowers and decaying wood.

Gliscrochilus sp. – new to Great Britain, associated with decaying oak and birch trees. *Hallomenus*

binotatus – a nationally scarce polyphore fungus beetle

Diptera (True flies)

Dioxyna bidentis a nationally scarce picture-winged fly associated with bur marigold.

Seioptera vibrans a local species of ulidiid or picture-winged fly.

Solva marginata Drab Wood Soldierfly – locally widespread in the south but uncommon in the north and west.

Hemiptera (True Bugs)

Tropidosteptes pacificus is a true bug native to the USA and a recent arrival in Britain, first recorded in 2012 from the London area. It is likely to be a horticultural introduction. UK distribution unknown.

Araneae (Spiders)

Episinus angulatus is a tangle web spider. It is widespread in southern Britain but becomes very locally distributed in the north.

DISCUSSION

A good array of invertebrate species was found during this survey. Particularly of interest was the discovery of a new species of *Gliscrochilus* sap beetle for Britain, which perhaps illustrates the dynamic nature of the surrounding area with a motorway and ship canal adjacent carrying goods from many parts of the world. Further new species to Britain of this genus are known to be in the process of publication (Nick Button pers. comm) so it has been timely to be able to add to this process and contribute towards an update of the British identification key of this group with the Woolston Eyes discovery.

The site has had a history of invertebrate surveys over the years with contributions from Bill Hardwick, Clive Washington, Philip Baldwin, John McGaw, Steve Priestley, Phil Brighton, Jonathan Guest, and others. The author plans to combine all of these records and comment further on the Woolston fauna in the future as part of 2023 allowance of Green Letter Days, therefore discussion is limited here.

Pete Boardman. Natural England Field Unit. 27/01/23

APPENDIX I – full list of species encountered in 2022.

Species	Family	Order	Habitat
<i>Araniella cucurbitina</i> sensu stricto	Araneidae	Araneae	various vegetation
<i>Araniella opisthographa</i>	Araneidae	Araneae	arboreal
<i>Linyphia hortensis</i>	Linyphiidae	Araneae	shaded woodland floor
<i>Nerienne peltata</i>	Linyphiidae	Araneae	arboreal
<i>Metellina mengei</i>	Tetragnathidae	Araneae	ubiquitous
<i>Tetragnatha extensa</i>	Tetragnathidae	Araneae	acid & sedge peats
<i>Tetragnatha montana</i>	Tetragnathidae	Araneae	acid & sedge peats
<i>Enoplognatha ovata</i> sensu stricto	Theridiidae	Araneae	ubiquitous
<i>Episinus angulatus</i>	Theridiidae	Araneae	tall sward & scrub
<i>Xysticus cristatus</i>	Thomisidae	Araneae	open habitats
<i>Byturus ochraceus</i>	Byturidae	Coleoptera	tall sward & scrub
<i>Cantharis cryptica</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Cantharis decipiens</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Cantharis figurata</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Rhagonycha fulva</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Rhagonycha testacea</i>	Cantharidae	Coleoptera	tall sward & scrub
<i>Amara plebeja</i>	Carabidae	Coleoptera	tall sward & scrub
<i>Pterostichus melanarius</i>	Carabidae	Coleoptera	tall sward & scrub
<i>Clytus arietis</i>	Cerambycidae	Coleoptera	decaying wood
<i>Agelastica alni</i>	Chrysomelidae	Coleoptera	arboreal
<i>Crepidodera aurata</i>	Chrysomelidae	Coleoptera	arboreal
<i>Crepidodera aurea</i>	Chrysomelidae	Coleoptera	arboreal
<i>Gastrophysa viridula</i>	Chrysomelidae	Coleoptera	tall sward & scrub
<i>Neocrepidodera transversa</i>	Chrysomelidae	Coleoptera	tall sward & scrub
<i>Phaedon tumidulus</i>	Chrysomelidae	Coleoptera	tall sward & scrub
<i>Coccinella septempunctata</i>	Coccinellidae	Coleoptera	ubiquitous
<i>Harmonia axyridis</i>	Coccinellidae	Coleoptera	ubiquitous
<i>Propylea quatuordecimpunctata</i>	Coccinellidae	Coleoptera	ubiquitous
<i>Phyllobius pomaceus</i>	Curculionidae	Coleoptera	tall sward & scrub
<i>Polydrusus formosus</i>	Curculionidae	Coleoptera	arboreal
<i>Adrastus pallens</i>	Elateridae	Coleoptera	tall sward & scrub
<i>Agriotes acuminatus</i>	Elateridae	Coleoptera	tall sward & scrub
<i>Athous haemorrhoidalis</i>	Elateridae	Coleoptera	tall sward & scrub
<i>Denticollis linearis</i>	Elateridae	Coleoptera	decaying wood
<i>Hemicrepidius hirtus</i>	Elateridae	Coleoptera	tall sward & scrub
<i>Brachypterus glaber</i>	Kateretidae	Coleoptera	tall sward & scrub
<i>Gliscrochilus</i> sp.	Nitidulidae	Coleoptera	decaying wood
<i>Meligethes aeneus</i>	Nitidulidae	Coleoptera	decaying wood
<i>Oedemera nobilis</i>	Oedemeridae	Coleoptera	tall sward & scrub

<i>Acrotrichis henrici</i>	Ptiliidae	Coleoptera	decaying wood
<i>Anaspis frontalis</i>	Scraptiidae	Coleoptera	decaying wood
<i>Anaspis maculata</i>	Scraptiidae	Coleoptera	decaying wood
<i>Anaspis thoracica</i>	Scraptiidae	Coleoptera	decaying wood
<i>Philonthus succicola</i>	Staphylinidae	Coleoptera	tall sward & scrub
<i>Lagria hirta</i>	Tenebrionidae	Coleoptera	tall sward & scrub
<i>Hallomenus binotatus</i>	Tetratomidae	Coleoptera	decaying wood
<i>Forficula auricularia</i>	Forficulidae	Dermaptera	vegetated places
<i>Sylvicola cinctus</i>	Anisopodidae	Diptera	shaded woodland floor
<i>Leptogaster cylindrica</i>	Asilidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Sicus ferrugineus</i>	Conopidae	Diptera	short sward & bare ground
<i>Argyra diaphana</i>	Dolichopodidae	Diptera	running water; wet woodland
<i>Dolichopus popularis</i>	Dolichopodidae	Diptera	wetland sites
<i>Sciapus platypterus</i>	Dolichopodidae	Diptera	shaded woodland floor
<i>Dolichocephala irrorata</i>	Empididae	Diptera	running water; wet woodland
<i>Empis livida</i>	Empididae	Diptera	tall sward & scrub
<i>Empis stercorea</i>	Empididae	Diptera	shaded woodland floor
<i>Empis tessellata</i>	Empididae	Diptera	tall sward & scrub
<i>Hybos culiciformis</i>	Hybotidae	Diptera	shaded woodland floor
<i>Orfelia nemoralis</i>	Keroplastidae	Diptera	decaying wood
<i>Meiosimyza rorida</i>	Lauxaniidae	Diptera	shaded woodland floor
<i>Minettia inusta</i>	Lauxaniidae	Diptera	shaded woodland floor
<i>Peplomyza litura</i>	Lauxaniidae	Diptera	shaded woodland floor
<i>Sapromyza sexpunctata</i>	Lauxaniidae	Diptera	woodland
<i>Tricholauxania praeusta</i>	Lauxaniidae	Diptera	shaded woodland floor
<i>Austrolimnophila ochracea</i>	Limoniidae	Diptera	decaying wood; shaded woodland floor
<i>Dicranomyia autumnalis</i>	Limoniidae	Diptera	acid & sedge peats
<i>Dicranomyia chorea</i>	Limoniidae	Diptera	running water; shaded woodland floor; scrub
<i>Epiphragma ocellare</i>	Limoniidae	Diptera	decaying wood
<i>Heliopsis longirostris</i>	Limoniidae	Diptera	marshland
<i>Limonia flavipes</i>	Limoniidae	Diptera	shaded woodland floor

<i>Limonia nubeculosa</i>	Limoniidae	Diptera	decaying wood; shaded woodland floor
<i>Limonia phragmitidis</i>	Limoniidae	Diptera	shaded woodland floor
<i>Molophilus griseus</i>	Limoniidae	Diptera	acid & sedge peats; marshland; wet woodland
<i>Ormosia nodulosa</i>	Limoniidae	Diptera	shaded woodland floor
<i>Phylidorea ferruginea</i>	Limoniidae	Diptera	acid & sedge peats; marshland
<i>Phaonia subventa</i>	Muscidae	Diptera	shaded woodland floor
<i>Anatella unguigera</i>	Mycetophilidae	Diptera	decaying wood
<i>Coelosia flava</i>	Mycetophilidae	Diptera	decaying wood
<i>Sciophila fenestella</i>	Mycetophilidae	Diptera	decaying wood
<i>Opomyza germinationis</i>	Opomyzidae	Diptera	tall sward & scrub
<i>Palloptera quinque maculata</i>	Pallopteridae	Diptera	tall sward & scrub
<i>Rivellia syngenesiae</i>	Platystomatidae	Diptera	tall sward & scrub
<i>Boreoclytocyclus ocellaris</i>	Psychodidae	Diptera	decaying vegetation
<i>Rhagio lineola</i>	Rhagionidae	Diptera	shaded woodland floor
<i>Rhagio scolopaceus</i>	Rhagionidae	Diptera	tall sward & scrub
<i>Scathophaga suilla</i>	Scathophagidae	Diptera	running water; tall sward & scrub
<i>Limnia unguicornis</i>	Sciomyzidae	Diptera	acid & sedge peats; marshland; running water
<i>Sepsis violacea</i>	Sepsidae	Diptera	tall sward & scrub
<i>Beris geniculata</i>	Stratiomyidae	Diptera	acid & sedge peats; wet woodland
<i>Beris morrisii</i>	Stratiomyidae	Diptera	shaded woodland floor
<i>Beris vallata</i>	Stratiomyidae	Diptera	tall sward & scrub
<i>Chloromyia formosa</i>	Stratiomyidae	Diptera	tall sward & scrub
<i>Chorisops tibialis</i>	Stratiomyidae	Diptera	tall sward & scrub
<i>Microchrysa polita</i>	Stratiomyidae	Diptera	tall sward & scrub
<i>Baccha elongata</i>	Syrphidae	Diptera	shaded woodland floor
<i>Cheilosia pagana</i>	Syrphidae	Diptera	shaded woodland floor
<i>Episyrphus balteatus</i>	Syrphidae	Diptera	tall sward & scrub
<i>Eristalis nemorum</i>	Syrphidae	Diptera	acid & sedge peats
<i>Eristalis tenax</i>	Syrphidae	Diptera	rich flower resource
<i>Helophilus pendulus</i>	Syrphidae	Diptera	acid & sedge peats
<i>Melanostoma scalare</i>	Syrphidae	Diptera	tall sward & scrub

<i>Myathropa florea</i>	Syrphidae	Diptera	decaying wood
<i>Neoascia podagrica</i>	Syrphidae	Diptera	flowery places
<i>Parhelophilus frutetorum</i>	Syrphidae	Diptera	acid & sedge peats
<i>Sphaerophoria scripta</i>	Syrphidae	Diptera	tall sward & scrub
<i>Syrphus ribesii</i>	Syrphidae	Diptera	flowery places
<i>Tropidia scita</i>	Syrphidae	Diptera	acid & sedge peats
<i>Xylota segnis</i>	Syrphidae	Diptera	decaying wood
<i>Prosenia siberita</i>	Tachinidae	Diptera	woodland edge
<i>Campiglossa misella</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Chaetostomella cylindrica</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Dioxyna bidentis</i>	Tephritidae	Diptera	acid & sedge peats; marshland
<i>Tephritis neesii</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Urophora quadrifasciata</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Xyphosia miliaria</i>	Tephritidae	Diptera	short sward & bare ground; tall sward & scrub
<i>Nephrotoma flavipalpis</i>	Tipulidae	Diptera	shaded woodland floor
<i>Nephrotoma quadrifaria</i>	Tipulidae	Diptera	shaded woodland floor
<i>Tipula fascipennis</i>	Tipulidae	Diptera	shaded woodland floor
<i>Tipula oleracea</i>	Tipulidae	Diptera	acid & sedge peats
<i>Tipula scripta</i>	Tipulidae	Diptera	shaded woodland floor
<i>Tipula unca</i>	Tipulidae	Diptera	running water; wet woodland
<i>Seioptera vibrans</i>	Ulidiidae	Diptera	shaded woodland floor
<i>Solva marginata</i>	Xylomyidae	Diptera	decaying wood
<i>Entomobrya intermedia</i>	Entomobryidae	Entomobryomorpha	ground layer vegetation
<i>Pogonognathellus longicornis</i>	Tomoceridae	Entomobryomorpha	decaying ground layer vegetation
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera	vegetated places
<i>Aphrophora alni</i>	Aphrophoridae	Hemiptera	woodland and scrub
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera	tall vegetation
<i>Aphrodes makarovi</i>	Cicadellidae	Hemiptera	tall sward & scrub
<i>Errastunus ocellaris</i>	Cicadellidae	Hemiptera	tall sward & scrub

<i>Eupteryx aurata</i>	Cicadellidae	Hemiptera	nettles, well vegetated places
<i>Eupteryx cyclops</i>	Cicadellidae	Hemiptera	shaded woodland floor
<i>Eupteryx urticae</i>	Cicadellidae	Hemiptera	tall sward & scrub
<i>Kybos butleri</i>	Cicadellidae	Hemiptera	arboreal
<i>Populicerus nitidissimus</i>	Cicadellidae	Hemiptera	arboreal
<i>Ribautiana debilis</i>	Cicadellidae	Hemiptera	tall sward & scrub
<i>Ribautiana tenerrima sensu stricto</i>	Cicadellidae	Hemiptera	tall sward
<i>Cixius nervosus</i>	Cixiidae	Hemiptera	arboreal
<i>Tachycixius pilosus</i>	Cixiidae	Hemiptera	tall sward
<i>Ditropis pteridis</i>	Delphacidae	Hemiptera	tall sward & scrub
<i>Javesella obscurella</i>	Delphacidae	Hemiptera	tall sward & scrub
<i>Kleidocerys resedae</i>	Lygaeidae	Hemiptera	arboreal
<i>Campyloneura virgula</i>	Miridae	Hemiptera	arboreal
<i>Capsus ater</i>	Miridae	Hemiptera	tall sward & scrub
<i>Closterotomus norwegicus</i>	Miridae	Hemiptera	tall sward & scrub
<i>Deraeocoris (Deraeocoris) ruber</i>	Miridae	Hemiptera	tall sward & scrub
<i>Grypocoris (Lophyromiris) stysi</i>	Miridae	Hemiptera	tall sward & scrub
<i>Leptopterna dolabrata</i>	Miridae	Hemiptera	tall sward & scrub
<i>Liocoris tripustulatus</i>	Miridae	Hemiptera	tall sward & scrub
<i>Lygocoris (Lygocoris) pabulinus</i>	Miridae	Hemiptera	tall sward & scrub
<i>Lygus rugulipennis</i>	Miridae	Hemiptera	tall sward & scrub
<i>Megaloceroea recticornis</i>	Miridae	Hemiptera	tall sward & scrub
<i>Neolygus viridis</i>	Miridae	Hemiptera	arboreal
<i>Plagiognathus (Plagiognathus) arbustorum</i>	Miridae	Hemiptera	tall sward & scrub
<i>Stenotus binotatus</i>	Miridae	Hemiptera	tall sward & scrub
<i>Tropidosteptes pacificus</i>	Miridae	Hemiptera	vegetated places
<i>Dolycoris baccarum</i>	Pentatomidae	Hemiptera	tall sward & scrub
<i>Piezodorus lituratus</i>	Pentatomidae	Hemiptera	Gorse
<i>Chamaepsylla hartigi</i>	Psyllidae	Hemiptera	Birch
<i>Tingis (Tingis) ampliata</i>	Tingidae	Hemiptera	tall sward & scrub
<i>Trioza urticae</i>	Triozidae	Hemiptera	Nettles
<i>Apis mellifera</i>	Apidae	Hymenoptera	Flowery places
<i>Bombus hypnorum</i>	Apidae	Hymenoptera	shaded woodland floor; tall scrub
<i>Bombus lapidarius</i>	Apidae	Hymenoptera	tall sward & scrub
<i>Bombus pascuorum</i>	Apidae	Hymenoptera	tall sward & scrub
<i>Bombus pratorum</i>	Apidae	Hymenoptera	shaded woodland floor; scrub
<i>Bombus terrestris</i>	Apidae	Hymenoptera	tall sward & scrub

<i>Bethylus cephalotes</i>	Bethylidae	Hymenoptera	tall sward & scrub
<i>Crossocerus podagricus</i>	Crabronidae	Hymenoptera	decaying wood
<i>Passaloecus singularis</i>	Crabronidae	Hymenoptera	decaying wood
<i>Colpotrochia cincta</i>	Ichneumonidae	Hymenoptera	vegetated habitats
<i>Rhogogaster viridis</i>	Tenthredinidae	Hymenoptera	poplars
<i>Tenthredopsis nassata</i>	Tenthredinidae	Hymenoptera	grasses
<i>Nemophora degeerella</i>	Adelidae	Lepidoptera	shaded woodland floor
<i>Anthophila fabriciana</i>	Choreutidae	Lepidoptera	tall sward & scrub
<i>Pleuroptya ruralis</i>	Crambidae	Lepidoptera	nettles
<i>Hypena proboscidalis</i>	Erebidae	Lepidoptera	tall sward & scrub
<i>Epirrhoe alternata</i>	Geometridae	Lepidoptera	tall sward & scrub
<i>Idaea aversata</i>	Geometridae	Lepidoptera	tall sward & scrub
<i>Ochlodes sylvanus</i>	Hesperiidae	Lepidoptera	tall sward & scrub
<i>Micropterix calthella</i>	Micropterigidae	Lepidoptera	arboreal
<i>Stigmella aurella</i>	Nepticulidae	Lepidoptera	tall sward & scrub
<i>Maniola jurtina</i>	Nymphalidae	Lepidoptera	tall sward & scrub
<i>Pararge aegeria</i>	Nymphalidae	Lepidoptera	tall sward & scrub
<i>Polygonia c-album</i>	Nymphalidae	Lepidoptera	tall sward & scrub
<i>Vanessa atalanta</i>	Nymphalidae	Lepidoptera	ubiquitous
<i>Pammene aurana</i>	Tortricidae	Lepidoptera	tall sward & scrub
<i>Coenagrion puella</i>	Coenagrionidae	Odonata	marshland
<i>Enallagma cyathigerum</i>	Coenagrionidae	Odonata	marshland
<i>Ischnura elegans</i>	Coenagrionidae	Odonata	marshland
<i>Dicranopalpus ramosus</i> (post 2015)	Phalangiidae	Opiliones	ubiquitous
<i>Leiobunum rotundum</i>	Phalangiidae	Opiliones	arboreal
<i>Atlantopsocus adustus</i>	Psocidae	Psocoptera	deciduous trees; alder
<i>Cepaea (Cepaea) hortensis</i>	Helicidae	Pulmonata	tall sward & scrub
<i>Limnephilus decipiens</i>	Limnephilidae	Trichoptera	acid & sedge peats; lake

EDITOR'S ACKNOWLEDGEMENTS

We have been producing an Annual Report on the Reserve's wildlife since 1978/79. This gives us a 45-year, unbroken data set to enable us to assess the significant and often worrying changes to the status of our many species. Brian Martin is currently finishing a book about the history of Woolston Eyes, how it was established as a nature reserve and how our bird populations, in particular, have changed over time. If you have an interest in the Reserve, it will be an essential purchase and packed with fascinating information. We will send out more details in due course.

These days, the production of this Report is very much a team effort and I have many people to thank for their contributions. David Spencer's assistance with the production aspects and Brian and Ros Martin's assiduous proof-reading have been invaluable. Equally, Dan Owen's willingness to both proof-read and produce the electronic version of the report has been extremely helpful. All of those who have written species accounts or articles have helped to share the burden of what is a fairly demanding annual task, for which I am very grateful. They are, in no particular order: Allan Rustell, Peter Boardman, Mike Miles, Dave Steel, Brian Baird, Dave Hackett, Dan Owen, John Blundell, Brian Ankers, Brian Martin and David Spencer.

My thanks also go to those photographers who have kindly allowed me to use their excellent images. I would encourage any visiting photographers to post photographs on our website, as we draw on this resource, with due permission and acknowledgement, when looking to illustrate this Report. We are equally very fortunate to have the services of Colin Woolf, one of the nation's finest wildlife artists, who freely gives his time to produce the covers for our reports. He continues to excel himself and this year's painting of our Penduline Tit is again outstanding.

Finally, there would, of course, be no Report without the massive amount of survey and recording work which takes place on a daily basis, for which I thank all those permit holders, volunteers, ringers and wardens who have contributed such a wealth and variety of information on our wildlife.

David Bowman



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