



Reserve Opening Times:

Wednesday, Saturday and Sunday
9am - 5pm (4pm Nov - end of Feb)

Visitor Centre

10am - 4pm

Trustees:

Kirsty McLeod - Treasurer
David Nesham
John Brook
Peter Murphy
Graham Barlow
Ian Willoughby
Jerry Knapp
Maggie Bellwood
John Hart

Company Secretary - Peter Murphy
Report Editor - Peter Murphy

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Photographs:

Front and back cover: The Bee Garden - from an original photograph by Barbara Murphy

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Introduction

It is hard to believe that 28th July 2020 will mark the 20th anniversary of the official opening of the Reserve by the then Minister for the Environment Michael Meacher. So much has been achieved since then. Less than a year earlier on 2nd October 1999 the construction of the wetland areas had just been completed and it was decided to hold a “Reserve Open Day” with invitees including the local wildlife groups, local church and residents groups, councillors and the local MP with guided walks around the site. Things were very basic in those days and the invitation stated “It is unlikely there will be refreshments and there are no toilets at present”. How things have changed since then and it is all down to our dedicated band of volunteers who have worked so hard to make it the wonderful community asset it is today.

The facilities are certainly much nicer today than they were back in 1999. Major improvements to the toilets were completed by the middle of January this year and we now have very nice facilities which were desperately needed for the increasing number of visitors to the Reserve. In June the new hard path from the Reedbed Hide to the Dragonfly Ponds was also completed and this has proved particularly beneficial for wheelchair users. With the very wet autumn we experienced this year the old path would have been very difficult to negotiate.

Early in the year the Reserve received another award - the Landscape Stewardship Award which aims to celebrate projects that have made a significant impact on protecting and enhancing the landscape. The award was presented at the Leeds Architecture Awards ceremony on Thursday 28th February at the Victoria Hall in Leeds Town Hall.

As a nature reserve, managing the habitat for wildlife is, of course, a major part of our work and, unlike many organisations, we are in the fortunate position of having a large and dedicated team of volunteers working on Mondays and Fridays throughout the year. From the beginning of January there are important tasks to be done on the wetlands. On the Lagoon vegetation has to be cleared on the three islands in readiness for the return of the Oystercatchers. These birds arrive early in the year, the first bird this year on 2nd February. Clearing out the nest holes in the Sand Martin bank and refilling them with fresh sand is another big job for early in the year as these birds start to arrive in March, the first birds this year on 20th. Numbers bounced back this year with 180 nesting holes after a fairly disappointing year in 2018.

Caspian Gull and Woodlark were new birds for the Reserve, the latter only a flyover, but the real highlight was the Great White Egret which arrived on one of the tern rafts on the Lagoon on 25th August and was seen frequently up until 28th October. There had been a report of one flying over on 9th December last year but this year was the first time the species had been recorded actually on the Reserve. Barn Owl, Little Owl and Kestrel nested successfully in their usual boxes and all raising two young. But, as always, there were some disappointments - Tufted Ducks again failed to nest as did Common Terns for the second year running.

New bird species are added to the Reserve list most years but new butterflies are less easy to find. However, there were three this year - Brown Argus, Essex Skipper and Dark-green Fritillary. Even in good Painted Lady years numbers at Rodley had been disappointing but this year was exceptional with double figure counts on the buddleias in August. Peacocks showed some improvement with the best summer emergence for years but Small Tortoiseshells continued to struggle.

Autumn is always an interesting time as winter visitors start to arrive but two birds in particular were sought after in the last two months of the year. An immature Scaup on the Lagoon from 10th November tested the birdwatchers' ID skills and a Firecrest, first seen in the bridge car park area on 14th December, proved a real challenge for the photographers.

Autumn is also a particularly busy time for the outdoor volunteers, not helped this year by the very wet conditions. Under the Stewardship Agreement with Natural England there is a requirement to cut a minimum of one sixth of the Reedbed each year and work on this got underway in October. The Stewardship Agreement also requires us to undertake rotational coppicing work on the Reserve, starting in the autumn. The Trust has a "no burn" policy and we make use of the thinnings and other prunings to create woven dead hedging, build mammal towers and insect hotels, build fencing and more recently to add chippings to the remaining unsurfaced paths.

But there were also three new projects this year for the volunteers. On Poplar Field a large area of the grassland had been cleared earlier in the year for the sowing and planting of native wildflowers over the autumn period. This will provide more valuable habitat for bees and other invertebrates in the future. On the Duck Marsh an artificial Kingfisher nesting bank was constructed which, if successful, will provide excellent views from the Willow Path Hide. At the Dragonfly Ponds an area behind Bruce's and Chadwick Ponds was cleared for establishing a small copse

of trees, predominantly Downy Birch, which is designed to increase insect abundance and diversity and provide the type of foraging habitat that will be particularly attractive to the larger dragonflies.

Thanks to the very wet weather, drying out the Wet Grassland for its annual autumn cut proved virtually impossible and the work had to be carried out with great care using the Reserve's small tractor and manual work. This was completed in December and the area re-flooded for the wildfowl.

We could not, of course, achieve all that we do without the support of our visitors. Most of our events are provided free of charge and from the generous donations we receive in the Visitor Centre we know how much this is appreciated. A number of new events were launched this year to encourage more families to visit the Reserve and participate in activities, some of these linked to national campaigns. On Saturday 26th and Sunday 27th January it was the Big Garden Birdwatch in the Manager's Garden and Bee Garden, on Saturday 16th February the Build a Nest Box event for National Nest Box Week and on Saturday 23rd March Supervised Pond Dipping.

Away from the Reserve, we again had a stand at the Science Fair at Leeds City Museum on Saturday 16th March. As we did last year, we took along some of our Harvest Mice with Barn Owl pellets for dissection. Both proved as popular as ever.

Nearly 1,000 children participated in what proved to be another very successful Easter Egg Hunt run by Aireborough Rotary Club on Easter Sunday thanks to some excellent weather. This event raises valuable funds for local charities and introduces many new visitors to the Reserve. We are grateful to the cricket club for allowing vehicles to park on their premises for this event and others this year. This was invaluable and considerably reduced the amount of traffic along the road.

The Spring Bird Walk on 5th May was one of the smaller events held on the Reserve but this too had a record attendance of more than 70 visitors this year. The 4th Leeds Birdfair was the second big event of the year and this took place on Saturday 22nd June. In what had been a very wet June the fair enjoyed one of the very few pleasant days and was very well supported. This time it was the neighbouring farmer who came to the rescue by allowing car parking on his field.

At this year's Birdfair the Reserve was officially recognised as a Dragonfly Hotspot by the British Dragonfly Society. In recognition of the award the Society would later present the Reserve with a dragonfly information board to be sited at the ponds

With the increasing popularity of the "Bioblitz" it was decided to run the first one at Rodley on Saturday 27th July as a Nature Quest Day. It was to be a week of sunny, dry days and record-breaking temperatures, reaching 34° in the shade at the Reserve on Thursday 25th but sadly it didn't last until the Saturday, though many enthusiastic families still turned up to enjoy the various activities in the steady rain which lasted all day. The Bat Night, planned for the same evening, was a victim of the weather and had to be cancelled.

The Summer Fair has always been one of our main fundraising events. This year it was held on Saturday August 17th and after some heavy showers early on it enjoyed a bright and breezy day.

The decision to run a Bat Night in the autumn was a departure from what we have done in the past but it proved a good move. Held on Saturday 21st September, the event enjoyed a beautiful evening after a warm sunny day. It was fully booked up and participants had plenty of opportunities to pick up the many bats on the Reserve's detectors. Other autumn events included Pie and Peas and a Fungus Foray. Normally held on the same day, this wasn't possible this year and it was perhaps a good job it wasn't. The Fungus Foray on Sunday 20th October had a largely dry day - very different to the Pie and Peas event which had a day of grey skies and heavy rain on Saturday 26th. Nevertheless, this didn't deter the participants and it was, as always, very successful.

Two new events were also held in the autumn. On Sunday 27th October it was Halloween - Creepy Crafts and on Saturday 30th November a Christmas Craft and Gift Fair. The middle of the Coppice provided an ideal site for the "Witches in the Wood" and the thatched gazebo for "Santa's Grotto". Fortunately, both events enjoyed rare fine, dry days and were very well supported. A big thank you must go to the Friends of Rodley Nature Reserve who not only organise these events but also man the Visitor Centre throughout the year, raising valuable funds for the Reserve.

The new autumn events are a good fun day out for the family but the education of children and getting them to appreciate the importance of our wonderful wildlife is still a major part of our work and this is why we launched the Rodley Robins children's club in May 2016. The Robins

enjoyed another full year of different natural history activities. Our Education Team had their usual very busy year looking after the many primary school classes and uniformed organisations that visit. Again, none of this would be possible without our dedicated teams of volunteers who run these activities.

It would be wrong not to say something about plastic pollution in the introduction to this year's report. Thanks to people like Sir David Attenborough the damage that plastic pollution is doing to our environment and indeed our planet is now firmly at the top of the agenda and everyone is finally talking about it and in some cases doing something about it. As a responsible nature reserve we know that we must do all we can to eliminate single-use plastic in particular and visitors who purchase small bags of bird food from us will notice that we have now switched to paper bags which are recyclable. We have also joined Yorkshire Water's campaign asking the public to stop using single-use plastic water bottles and to take advantage of the best water in the county. We are now part of the National Refill Campaign, supported by Yorkshire Water. Please call in at our Visitor Centre and ask us to refill your reusable water bottle for free.

In the introduction to last year's report we referred to our concerns with regard to the proposed development of the old Barker's factory site which is next to our main entry gates. The site has been derelict since the factory was demolished in 2007 but it was inevitable that it would be developed for housing at some point. Rodley Nature Reserve Trust is not in principal opposed to the development of this site but it does have some serious concerns over its impact on wildlife and the practicalities surrounding the project. A full response was submitted by the Trust to the Leeds City Council Planning Department detailing its concerns when we first learned about the proposed development. Outline planning permission has now been granted subject to a range of conditions which include the retention of trees along the riverbank to maintain a "buffer zone" to protect the wildlife corridor along the river. Details of the planning decision can be found in the Leeds City Council Planning public access website.

Development of the site is dependent on replacement of the current, ageing swing bridge. While the construction of a new swing bridge over the canal may have some benefits, we are seriously concerned over problems of access to the Reserve by visitors, volunteers and suppliers during the period of construction. Because the canal can only be closed to boat traffic in the month of February it is now looking as though work will be delayed until January 2021. No building work on the Barker's site

can be done until the new bridge is complete. The Trust will continue to monitor proceedings closely and will liaise with the developers and our landlords, Yorkshire Water, to get the best outcome we can for the Reserve.

Rodley Nature Reserve - Monthly Roundup for 2019

January

Temperatures varied widely in the first half of the month reaching double figures some days and it was mainly dry. The second half was much colder, though the temperature did rise as high as 11°C for a time on 25th and 26th. In the last few days of the month, however, it was bitterly cold with temperatures struggling to reach 1°C or 2°C during the day. Much of the wetlands were frozen over on 23rd and again from 30th with temperatures as low as minus 6°C that night. There was overnight snow on 31st.

Duck numbers on the wetlands fluctuated throughout the month with some of the best counts late in the day. Then and very early in the day were certainly the best times to see gatherings of Goosanders with numerous double figure counts and a best of 18 on 30th. Tufted Duck numbers peaked at 29 towards dusk on 30th – this the highest January count since 2013. As many as 10 Wigeon were on the Lagoon on 2nd but they soon moved on. It was an excellent month for Pochard though with birds on the Lagoon daily and as many as 11 including nine males – this the highest ever January count. Goldeneye too were seen almost daily with up to eight birds and two males displaying to a female on one date. It was a poor month for Gadwall with a maximum of 13 the lowest January count since 2010. A Shelduck on the Lagoon briefly on 20th was unexpected at this time of year.

A Green Sandpiper had been present until the end of December and one was again seen on several dates on the Wet Grassland up to 16th. Snipe were hard to find with sightings on the Lagoon on just three dates and of no more than two birds. Water Rails were a bit more obliging with sightings on all four main wetland areas and two birds on a couple of dates. A Cetti's Warbler was reported on four dates, on three occasions from the Reedbed Hide. Three figure counts of Black-headed Gulls are commonplace at this time of year but a report of more than 500 on the Lagoon on 5th was exceptional. Little Egrets are not normally seen here in the winter months but single birds flew over on 26th and 27th and one provided good views on the bottom island on the Lagoon on 30th. At the other end of the Lagoon a Kingfisher was observed catching seven small fish in quick succession from a perch at the edge of the top island on the same date.

On the farmland Greylag Geese numbers reached around 200 at times with similar numbers of Canada Geese – these the highest ever January

counts for both species. Flocks of Pink-footed Geese flew over on several dates with 300+ flying west on 19th the highest number reported.

On Tim's Field Linnet numbers were disappointing with a best count of just 59 on 6th. There was report of 34 Chaffinches there on 5th – these probably winter visitors – but numbers were otherwise in single figures.

Large numbers of Jackdaws gathered towards dusk at a roost site in woodland on the far bank of the river opposite the Wet Grassland. One or two birds showing characteristics of “Nordic” Jackdaw were reported on the farmland on several dates.

Other sightings this month included a Chiffchaff on 6th, a Woodcock by the Lagoon on 7th, a Goldcrest on seven dates, a Treecreeper on two dates, Grey Wagtail on three dates with three in the compound on 19th, a Kestrel on three dates, a Peregrine Falcon on four dates, a Common Buzzard on two dates and Red Kites on six dates with two on one occasion. Lesser Redpolls were reported on four dates with up to three in the roadside alders and on John Ackroyd Meadow. Six Siskins were in the alders on 6th. Coal Tits have usually been hard to find here but they enjoyed their best year ever last year and single birds were reported on three dates this month.

It was an excellent month for sightings of Song Thrush. Largely absent for most of the autumn, birds start to reappear in December and are usually singing from early in the year. Up to three were seen from the Visitor Centre on Mike Fisk Meadow and a bird was recorded in the Bee Garden most days with two on one date. The first report of a singing bird was as early as 6th. Winter thrushes were thin on the ground with no more than nine Fieldfares seen. There was a report of 19 Redwings on the farmland on 6th but otherwise no more than six.

It was a good month for owls. Little Owls can be hard to find in January but there were sightings on three dates. It was a blank year for Tawny Owls last year but there were daytime sightings on Bentley's Path and in the Coppice this month. Barn Owls were seen on the Scrubland almost daily but you had to be up early in the morning to see them. Two birds were reported on several occasions.

It was also a good month for mammal sightings. After a prolific breeding season last year Foxes were seen most days with two together on occasions. Roe Deer were reported on a number of dates with often two

and on one date three animals on the Scrubland. However, a Brown Hare on Mike Fisk Meadow on 27th was a rare event.

Volunteers working on habitat management had to endure some very cold days but it was largely dry. Willow coppicing was in full swing, much of the coppiced wood being used to rebuild or repair dead hedges around the Reserve.

February

It was to be a month of extremes weather-wise. Overnight snow left a good covering on 1st and there were more snow and sleet showers during the day. More very cold and frosty nights followed and much of the wetlands remained frozen over. Milder conditions brought fog and heavy rain on 5th and from 7th it was strong to gale force winds for a time. There was a dramatic change in the second half of the month, high pressure from Europe bringing dry, sunny and some unseasonably warm weather. Temperatures soared to a record 21°C in London and even here they reached the high teens, bringing out some early butterflies. Commas and Small Tortoiseshells and, more unusually, a Small White were all recorded.

The small area of ice-free water on the Lagoon brought in good numbers of wildfowl in the first few days of the month. Pochard numbers fluctuated but 10 were present on 2nd and 11 on 9th as the ice disappeared. Numbers fell away thereafter with a single bird on 24th the last of the month. A count of 16 Goldeneye on 3rd (Nine on the Lagoon and seven on the river) was the joint highest ever for the Reserve. Gadwall numbers increased considerably on 3rd with 47 on the Lagoon and a further 13 on the river – this the highest ever February count. Twenty Tufted Ducks were on the river on 3rd but counts most days were less than half that number.

This is the time of year when we look forward to seeing the Oystercatchers returning and we didn't have to wait long, the first bird arriving on 2nd. It was joined by a second bird on 10th. The first Great Crested Grebe was back on the Lagoon on 20th with a second bird arriving on 27th. A Little Egret on the Duck Marsh on 2nd was rather less expected. Among the other wetland birds, Water Rails were recorded on three dates – on the Lagoon, Wet Grassland and riverbank near the Dragonfly Ponds. Kingfishers were seen most days. On 20th one was reported excavating a nest hole in the Sand Martin Bank on the Lagoon.

On the farmland a count of 192 Greylag Geese on 3rd was the highest ever for February. Numbers started to fall away in the latter part of the month. Canada Geese numbers were somewhat lower with a best count of 126 on 27th. A “Nordic” Jackdaw was again picked out on a couple of occasions among the flock of Jackdaws on the farmland this month as was a Caspian Gull among the many other gulls there on 24th - this a new bird for the Reserve.

Other sightings included a Brambling in the Manager’s Garden on 2nd, a Green Woodpecker there on 23rd, a Chiffchaff on the same date, a Grey Partridge on the farmland on 15th, a Treecreeper on two dates, a Goldcrest on two dates and a Cetti’s Warbler on three dates. Linnet numbers on Tim’s Field were again disappointing with sightings on just two dates with no more than 21 birds. A few Siskin and Lesser Redpolls were recorded on several dates, the roadside alders always worth checking at this time of year for these birds. Single Skylarks were reported flying off Tim’s Field on two dates and three flew over the Reserve on one date. Among other birds flying over this month were 520 Pink-footed Geese heading west/north west on 16th, two Shelducks flying east on the same date and single Ravens on two dates.

Raptor-wise, Common Buzzards were seen on seven dates with five on one date; Red Kites were reported on eight dates with eight in view at the same time on one occasion and a Peregrine Falcon was seen on 9th and 10th. Kestrel activity increased with two very vocal birds over the compound on 17th. When it was realised that the platform at the nest box needed urgent repairs there were concerns that the birds would be put off but fortunately this was not the case. As regards our other box nesters, Little Owls were conspicuous by their absence this month but Barn Owls were seen on the Scrubland on four dates early in the day with two birds on two occasions.

It was another good month for mammal sightings. Up to three Roe Deer were seen frequently but six were reported on the Duck Marsh on 22nd. There was again a good deal of daytime Fox activity. An American Mink in an alder on the riverbank near the bridge on 17th was a less welcome visitor.

March

Last March it was the Beast from the East. This year it was rather less severe but we still had to endure rain and strong to gale force westerly winds throughout the first half of the month. After a day of steady rain on

16th the river finally burst its banks and flooded the farmland behind the car park. There was a considerable improvement in the latter part of the month; it was mainly dry and a beautiful, warm, sunny day on 20th saw temperatures reach 18°C, bringing out the first Brimstone Butterfly of the year along with Peacock, Comma and Small Tortoiseshell. There were some chilly nights but temperatures again rose to 16°C in the last few days of the month.

The flooded farmland was certainly popular with the birds, presumably feeding on drowned invertebrates. A total of 63 Gadwall reported here on 18th was the highest ever March count. However, the record went again on 24th with 66 recorded on the wetlands during an early morning WeBS count. Two Redshanks here on 17th were a bonus as were two Curlews flying over on the same date. Large numbers of Black-headed Gulls, Greylag Geese and Canada Geese were also present on the flooded field.

On the Lagoon the Sand Martin nesting bank was given its spring clean in readiness for the returning birds but the first potential lodgers were two Kingfishers that started excavating nesting holes from 6th. It was an excellent month for sightings of Kingfishers with usually two birds seen daily in the area. Up to four Oystercatchers were recorded with one pair in residence on the middle island. Lapwings were seen daily with up to eight birds and as many as six on the Wet Grassland on 31st. Towards the end of the month the pair of Great Crested Grebes were showing signs of nest building on a newly installed willow fish refuge on the Lagoon.

Apart from Gadwall, duck numbers started to fall away in the latter part of the month with no more than four Tufted Duck recorded. The last two Wigeon were on the flooded farmland on 18th and there were no reports of Pochard. However, as many as seven Goldeneye were still on the Lagoon on 17th and four were still present on 31st.

There were several double figure counts of Snipe on the Duck Marsh with up to 14 in the first week of the month. Numbers started to fall away in the last week with just two on 31st. Water Rails were reported on just two dates - one on the Lagoon on 17th and two on the riverbank on 29th. There were more sightings of Little Egret with a single bird on eight dates - unusual at this time of year for Rodley. A Cetti's Warbler was recorded on three dates - once near the Lagoon Hide and twice at the edge of the Reedbed.

As regards the winter thrushes, a few Redwing hung on until 6th but Fieldfares stayed rather longer with 18 on the farmland on 13th and two late flyovers on 30th. As the winter visitors started to drift away the first

spring visitors started to arrive. The first two Sand Martins were seen over the Lagoon near the nesting bank on 20th and on 24th at least 12 were over the water. An early Swallow was reported high over the Wet Grassland on 24th. Chiffchaffs were singing by 23rd and by the end of the month at least four were in song around the Reserve. The first Blackcaps were recorded on 24th - a male singing in roadside trees near the Lagoon and a female in the John Ackroyd Meadow hedgerow just below the Visitor Centre.

Early nesting was already underway. By 5th March a pair of Long-tailed Tits had constructed a beautiful domed nest in a thick patch of brambles at the roadside.

A Little Owl finally put in an appearance in the Manager's Garden on 17th after several weeks with no sightings. There were several sightings thereafter with one seen coming out of the nest box on one occasion. A Barn Owl was seen going into the box on the Scrubland on numerous occasions, but always very early in the morning. Two birds were seen on one date.

It was an excellent month for Common Buzzards with sightings reported on 13 dates and as many as five together on two dates. Two birds were seen regularly in and around trees on the far riverbank opposite the Wet Grassland - perhaps nest prospecting? Red Kites were reported on just four dates with three on one date. As regards the smaller raptors, there was a good deal of Sparrowhawk activity and on 3rd one took a male Reed Bunting under the feeders in the Bee Garden. Kestrels were seen at or near the nest box in the compound most days. It was a disappointing month for Peregrines, however, with just one flyover on 10th.

Other sightings this month included a Goldcrest on 3rd, Grey Wagtails on three dates with two at the Dragonfly Ponds on 23rd, Lesser Redpolls on four dates with a best count of 12 near the main gates on 23rd, a Nuthatch in trees near the bridge on 24th and a "Nordic " Jackdaw on the farmland on 27th. Among birds flying over were single Skylarks on two dates and three possible White Wagtails over the flooded farmland on 17th. Flocks of Whooper Swans flew over on two dates - 30 on 24th and 42 on 31st. However, perhaps the most exciting flyover was a Woodlark flying south over Tim's Field on 23rd - a new bird for the Reserve. There was a lot of Jay activity in the last week of the month with as many as 14 noisy birds together.

Tim's Field was ploughed on 7th but a small flock of Linnets remained in the area until 24th with up to 30 birds counted but it had generally been a disappointing winter for this species. Around 20 Chaffinches were still finding seed on the field on 16th with 12 on 24th.

There was again a lot of Fox activity with daytime sightings on eight dates. On 27th one was seen carrying a female Pheasant across the farmland. Roe Deer were reported almost daily with as many as eight on the Scrubland.

April

There was no danger of flooding this month - in fact just the reverse with no rain at all in the period from 4th to 24th. However, a cold, easterly breeze kept temperatures down and they were as low as 8°C some days. It started to warm up from 17th reaching 25°C for the annual Easter Egg Hunt on Sunday 21st. Several beautiful sunny days brought out butterflies in some numbers but it became much cooler again from 25th with heavy showers and thunder and lightening for a time. A grey, wet and cold day on 26th and a north westerly breeze brought temperatures down with a bump to just 9°C but the month ended on a rather milder note with some warm sunshine and just a light breeze.

Summer visitors start to arrive in numbers in April and Sand Martins are certainly the most numerous of these here. By 7th 34 nest holes had been excavated in the nesting bank on the Lagoon and just two weeks later there were 100. Not surprisingly, the Kingfishers soon gave up any thoughts of nesting there and there were just three sightings all month. Among the other hirundines, two early House Martins were seen on 3rd and there were further sightings of just two birds. Small numbers of Swallows were reported most days.

The first Willow Warblers were singing on 17th, 10 days later than last year and, rather strangely, the latest ever first date for this species. The first Common Whitethroat was singing in the usual roadside brambles on 19th and two days later five were recorded during an early morning WeBS visit. Much less common here than its cousin, a Lesser Whitethroat was reported near the Lagoon Hide on 27th and 28th. Other summer visitors to appear were two Yellow Wagtails on Tim's Field on 20th and one on the middle island on the Lagoon on 24th. A Wheatear was also on Tim's Field on 20th. Garden Warblers are usually among the last of the summer visitors to arrive and the first bird this year was in roadside trees on 28th - always the best place to find this species.

Back on the wetlands, the first Sedge Warblers were recorded on 20th and the first Reed Warblers on 21st. On the Lagoon the Great Crested Grebes reverted to their usual preferred nesting site on the middle island but it might not prove to be a good strategy with Canada Geese and Greylags also in residence and the constant presence of Herring Gulls and Lesser Black-backed Gulls looking for an easy meal. The pair of Oystercatchers nesting here did, however, manage to hatch two chicks and they were still present at the end of the month. But some were not as fortunate, a Canada Goose killing a Greylag gosling one day and a Carrion Crow killing a Canada Goose gosling. Unusually, Common Terns failed to put in an appearance, despite two rafts being launched early in the month to accommodate them.

Little Ringed Plovers have been few and far between in recent years but a single bird was recorded on three dates this month on the Wet Grassland, including a multi-ringed bird on 24th. The same area produced a Jack Snipe on 27th. The Duck Marsh was the place to see Common Snipe, a count of seven here on 10th being particularly good for the time of year.

Other sightings this month included a Treecreeper on 6th, a Green Sandpiper on 7th and 13th, a Grey Wagtail on four dates - three of these on the Lagoon, a Little Egret on four dates, a Red Kite on two dates and a Curlew flying over on 24th. There were numerous reports of a Little Owl in the Manager's Garden with two birds on 24th. A Barn Owl was seen regularly over the Scrubland and at the nest box, occasionally as late as 9.15am, giving some early visitors the opportunity to see it. It was another good month for sightings of Common Buzzard with birds reported on 10 dates and six in the air together on 6th. There was more activity at a possible nest site in trees on the far riverbank in the early part of the month but this died away later in the month.

Some early nesters already had eggs. One half of the Manager's Garden Hide had to be closed off to accommodate a nesting Wren and by 20th the nest box on the side of the Visitor Centre contained nine Great Tit eggs - live footage being relayed to the television in the Visitor Centre. Towards the end of the month a Lapwing's nest with four eggs was found on Tim's Field.

It was another good month for mammal sightings with Foxes seen virtually daily and at least three active dens with cubs. Roe Deer too were seen most days with often three but six together on Tim's Field on one date.

Two Weasel kits by the gate at the western end of the Coppice were a nice record for one visitor on 15th. An Otter made a rare daytime appearance on the river by the River Path on 10th, albeit still very early in the morning.

May

A strong, cold, northerly wind brought temperatures down with a bump from 3rd with daytime highs as low as 8°C. There was a distinct improvement from 12th with temperatures reaching 21°C with just a light south easterly breeze. It was much less settled again in the second half of the month with a stiff northerly /north westerly wind and rain at times.

Activity at the Sand Martin nesting bank on the Lagoon was intense this month with 177 nest holes counted on 19th (compared to just 71 at the same time last year). But the tern rafts remained empty and, most unusually, there were no sightings at all of Common Terns. Apart from a single bird on 1st, Kingfishers too were conspicuous by their absence this month. However, despite the constant presence of a handful of Herring and Lesser Black-backed Gulls the Great Crested Grebes managed to hatch four chicks and all were still to be seen at the end of the month. The two young Oystercatchers were flying this month and on occasions up to seven birds were reported.

Other families also started to appear on the wetlands this month. The first family of Coots was seen on the Wet Grassland on 4th with Moorhens on the Lagoon on 19th, Mallard on the Wet Grassland on 25th, Little Grebe on the Duck Marsh on 25th and Gadwall there on 29th. Sadly, activity at the two Mute Swan nests on the Duck Marsh and Wet Grassland died away and there were no signs of cygnets by the end of the month.

Water Rails can be hard to see at this time of year but one was heard on the Wet Grassland on 27th - the first record for more than two months. Little Egrets were reported on seven dates with four briefly on the Wet Grassland on 18th. A male Wigeon on the Lagoon on 11th and 12th was an unexpected visitor at this time of year.

Summer visitors continued to arrive with the first Swifts on 5th. Numbers were generally low but around 20 were reported over the Reserve on 11th. A Common Sandpiper was on one of the islands on the Lagoon on 6th and two were seen there on 8th. There were more reports of Lesser Whitethroat near the Lagoon Hide and Garden Warbler in the same area.

House Martin numbers remained typically low and around 16 over the Reserve on 26th was a good count these days.

Among the resident species Bullfinches are common birds here and the feeders in the Manager's Garden and Bee Garden are guaranteed to provide sightings but six males in the Manager's Garden on 11th was a particularly good count. The Manager's Garden also produced four sightings of a Little Owl this month, on one occasion emerging from the nest box there. Barn Owl activity continued throughout the month at the nest box on the Scrubland but sightings were limited to early morning and late evening. The Great Tits in the nest box on the side of the Visitor Centre were rather easier to watch - via the television in the centre - and nine young fledged successfully on 20th. Bluetits had taken up residence in the terrace box on the north facing wall of the centre and birds were still feeding young at the end of the month.

Other sightings this month included a Raven flying north west on 11th, a Peregrine Falcon over Mike Fisk Meadow on 26th, 19 Golden Plovers flying west on the same date and Grey Wagtail on four dates with two on two occasions. There was again a lot of Common Buzzard activity with sightings reported on seven dates, a best count of six in the air at once and a pair displaying over Tim's Field and riverside trees on 26th. It was another good month for mammal sightings with Foxes seen daily, a vixen and one or two juveniles providing good photo opportunities on occasions.

There was a good deal of Lapwing activity both on Tim's Field and the Wet Grassland. Not surprisingly, the nest on Tim's Field had been predated by 1st May but once the seed crop was sown on 23rd birds were soon back in residence again with up to seven counted there.

New bird species are added to the Reserve list most years but new butterflies are rather harder to find so the discovery of a Brown Argus on John Ackroyd Meadow on 19th May was quite special. There were further sightings on 25th and 29th with two on one occasion.

June

With the 4th Leeds Birdfair planned for 22nd June all eyes were on the weather this month and with low pressure dominating throughout the first three weeks it wasn't looking promising. There was a lot of heavy rain and unusually strong winds for the time of year - not the best conditions for erecting gazebos. Then, just a day before the event a very short spell of high pressure took charge and the fair enjoyed a rare pleasant, calm day.

Things went downhill again for a time from 24th with more rain but a beautiful, warm, sunny day on 27th saw temperatures reach 23°C and on 29th on a very hot day they soared up to 28°C.

When the sun did shine the butterflies and dragonflies responded. The first Painted Lady appeared on 16th and there were numerous reports of up to five subsequently. The first newly emerged Small Tortoiseshells were recorded on 27th and Banded Demoiselles were particularly numerous this year all around the Reserve.

On the wetlands it was a much better month for Kingfisher sightings. One in the Reedbed on 1st was the first record for a month but there were then reports almost daily with three in the Reedbed on 5th and three on the river on 10th almost certainly including juveniles. On the Lagoon all four young Great Crested Grebes continued to thrive and a Common Tern finally appeared on 1st but it didn't stay long. Two were present briefly on 16th and one on 23rd but the nesting rafts sadly remained unoccupied. It was a disappointing month for our commonest duck the Gadwall with just one family of eight ducklings on the Lagoon. One or two Little Egrets were present daily from the middle of the month. A Water Rail on the riverbank on 24th was the only record this month of this elusive bird and a Black-tailed Godwit on the Duck Marsh on 26th was only the fifth record of this species and the first since March 2016

Other sightings this month included four Golden Plovers flying west on 2nd, five Rooks on the farmland on the same date (an infrequent visitor here), a Coal Tit on 9th (the first record since 19th January), a Pied Wagtail with two juveniles on Tim's Field on 16th, a Treecreeper on 23rd and a Hobby on 23rd and 26th. Three Linnets on 3rd and six on 23rd were unusual for the time of year. Up to 10 Lapwings were counted on Tim's Field but the only reports of young came from the wetlands - one on the Wet Grassland and two on the Duck Marsh. Encouragingly, there were a few double figure counts of Swifts but a report of more than 100 over the river and Lagoon on 7th was exceptional. Mammal-wise, Roedeer are harder to spot in the summer due to the long vegetation but a female and juvenile provided excellent photo opportunities on the Duck Marsh on 16th.

The Willow Path was the place for bird song this month with Blackcap, Chiffchaff and Common Whitethroat virtually guaranteed. The first juvenile Common Whitethroats were seen in the Coppice and at the Dragonfly Ponds on 16th and a family party was subsequently reported in roadside trees. Rather surprisingly, there were no reports of Willow Warblers in the Coppice after 1st June.

There were rather more sightings of Little Owls in the Manager's Garden this month and on 22nd two juveniles were seen there near the nest box. Away from the garden a bird was seen near the Education Pond on one date and on a post near the compound gate on two occasions. There was a good deal of activity at the Barn Owl box on the Scrubland but usually late in the evening, a bird often flying off over the river to hunt beyond the far woodland. On 6th June a Tawny Owl was seen on top of the nest box post but again late in the evening.

Reports of Kestrels had been few and far between in May but there were numerous sightings from the middle of this month at the box in the compound. On 16th a female and one juvenile were reported outside the box and there were further reports of a juvenile on subsequent dates. Up to three Common Buzzards were seen with birds in and around trees on the far riverbank on several occasions, giving further hope of a possible nesting attempt. Red Kites were recorded on five dates with as many as six over the farmland on 1st during grass cutting.

July

It was to be a memorable month if only for the weather. It was unusually windy at times but increasingly hot and humid in the latter part of the month. A temperature of 34°C in the shade was recorded on the Reserve on 25th and on the same date a temperature of 38.7°C at Cambridge University Botanical Garden was the highest ever recorded in Britain. Overnight temperatures didn't drop below 20°C. It did become increasingly unsettled from 27th with heavy rain, thunder and lightning. There were severe flash floods in parts of Yorkshire but the River Aire remained within its banks.

Barn Owl activity at the nest box on the Scrubland increased considerably this month and a few visitors managed to catch sightings early in the day. On 14th a juvenile made its first appearance on the ledge of the box and two weeks later two juveniles were seen making short flights around the box just after sunset. Little Owls though were conspicuous by their absence with no sightings reported in the Manager's Garden.

There had been no reports of Peregrine Falcons since 26th May but on 13th July one and possibly two birds flew over the Reserve. On 24th two were seen, one on the pylon behind the Manager's Garden with prey and there were more sightings on four further dates. Only one juvenile Kestrel

had been seen at the nest box in the compound last month but on 6th July two were reported on the ledge of the box.

Numbers of birds on the Lagoon this month were generally disappointing. Where were all the big Gadwall families of last year? A few families were reported on the Reedbed but with no more than four ducklings. Tufted Ducks again failed to nest and no more than four birds were seen. All four Great Crested Grebe juveniles were present up to 17th but no more than three were seen after this date. Little Egrets were seen daily with as many as four on the Reedbed and Duck Marsh on occasions.

A Water Rail was heard at the back of the Duck Marsh on 1st and one was seen on the Wet Grassland on 28th. Kingfishers were reported on seven dates with two on the Lagoon on 28th and two on the Wet Grassland on 31st. A Common Sandpiper was on the Wet Grassland on 3rd and on one of the tern rafts on the Lagoon on 6th. A single Common Snipe was spotted on the Wet Grassland on 7th and 28th and a Teal was on the Duck Marsh on 27th - an infrequent visitor at this time of year. A Common Tern was on the Lagoon briefly on the same date. There was an increase in Grey Heron numbers this month with up to 10 birds reported.

It was an excellent month for butterflies with two more new species recorded - an Essex Skipper on the river path on 24th and a Dark Green Fritillary on buddleia at the Mike Sheldon Hide. The same buddleia produced at least 12 Peacocks on 31st - a very encouraging count after years of decline. There was also a rare double figure count of Small Tortoiseshells on 25th. Gatekeepers were also seen in reasonable numbers and Painted Ladies continued to be reported.

There were no reports of Goosanders on the river but six flew over in a westerly direction on 13th and 11 in the same direction on 28th. Another flyover was a Curlew on 14th. Other sightings included Red Kites on just two dates but grass cutting on the farmland on 22nd did bring in three for the rich pickings to be had. Common Buzzards were seen on five dates with two on two dates. Swift numbers were disappointing apart from one report of more than 200 birds high over the Reserve on 13th ahead of a weather front. A report of 235 Common Gulls on the farmland on 31st was the highest ever July count.

Numerous juvenile Goldfinches were among birds visiting the feeders in the Bee Garden this month and a flock of around 70 Goldfinches was reported on the meadows feeding on Knapweed seed. Juvenile Bullfinches were regular visitors to the feeders in the Manager's Garden.

Roe Deer are much harder to spot at this time of year with the long vegetation but a female and two juveniles were seen out on the Willow Path early in the morning on 7th at the start of a WeBS count.

August

There was a fine start to the month with temperatures reaching 26°C on 4th but it became increasingly unsettled from 9th with torrential rain, thunder and lightening followed by very strong winds and further rain at times. Daytime temperatures dipped to 16°C and it remained unsettled and windy up to 22nd. Things finally settled down from 23rd with light south westerly winds and temperatures reaching 27°C on 25th.

Warm, sunny days at the start of the month produced some good butterfly counts with the highest number of Painted Ladies ever recorded here. There were numerous double figure counts with 30+ on and around the buddleias at the entrance to the compound car park on 19th. Peacock numbers were also unusually high after years of decline, a count of 41 on buddleias on 2nd being an exceptional number.

A Little Egret was on the wetlands most days but the real highlight this month was the Great White Egret that appeared on one of the tern rafts on 25th. The bird was seen daily thereafter, moving between the wetlands and the canal.

Apart from a WeBS count of 73 on 4th Gadwall numbers were disappointing and Tufted Ducks were conspicuous by their absence - the first August in the Reserve's history with no sightings. No more than five Teal were present on the Duck Marsh. Water Rails proved elusive with just one sighting on the Lagoon on 31st. Snipe were equally elusive with just a single bird on the Wet Grassland on 31st. An immature Great Crested Grebe on the Lagoon on 24th was the first sighting for almost a month. A Green Sandpiper was on the Duck Marsh on 10th. Up to nine Cormorants were seen on the pylon behind the Reedbed but a report of 12 on the Lagoon on 7th was exceptional.

Other sightings included a Goldcrest on the entry road on 7th, a Nuthatch calling from the River Path on 14th, a Spotted Flycatcher on the Willow Path on 21st, a Tree Pipit over the Visitor Centre calling on 25th, a Common Redstart on the River Path on 26th and a Treecreeper near the river bridge on the same date. There were no reports of Grasshopper Warblers in the spring but one was reeling in brambles at the side of the Lagoon on 5th.

Mammal-wise, there were a number of reports of Roe Deer but six in the Reedbed on 4th was a particularly good count for the time of year.

It was another good month for Peregrine Falcons with a bird seen on six dates. A Hobby high over the Lagoon on 26th was a nice record. Common Buzzards were seen on 12 dates with four together on one occasion. Red Kites were recorded on just four dates with no more than two birds. Barn Owl activity was limited to late evening and early morning but there was one rare mid-afternoon sighting of a juvenile in trees near the nest box on 11th. A Little Owl was reported on three dates, on each occasion in the Yorkshire Water compound. An Osprey flying south east on 25th was the only record this year.

Small birds can be hard to find in August with many going through their post-breeding moult. Reed Buntings, usually so numerous and easy to see, were totally absent. Bullfinches were rather more obvious with birds at the feeders in the Manager's Garden daily and as many as four juveniles among them. Goldfinches too appeared to have had a good breeding year with flocks on Mike Fisk Meadow including many juveniles.

Among the summer visitors a House Martin over the farmland on 4th was the first record since 26th May but around 40 were then reported flying south over the Dragonfly Ponds on 10th and 26 were counted on 17th. A mixed flock of around 100 Sand and House Martins was over the Lagoon on 31st. Swallow numbers were disappointing with just one double figure count - 20 on overhead wires near the workshop on 4th. Single Sedge Warblers on the Wet Grassland and Duck Marsh on 21st turned out to be the last sighting of the year - some two and a half weeks earlier than last year. Garden Warblers are much less common here than Blackcaps but there was a report of one on the Scrubland on 28th. One or two Chiffchaffs and Willow Warblers were still singing at the end of the month.

On the farmland less than a handful of Greylag Geese were present but a count of 62 Canada Geese on 12th was the highest for August since 2004.

September

There was plenty of dry weather and sunny days to bring out the butterflies, temperatures reaching 23°C on 21st but things went rapidly downhill from that point with grey skies and heavy rain. There was a brief respite on 25th but it was otherwise very wet to the end of the month with extensive flooding around the country. The River Aire did just stay within

its banks but it ran very high and coloured. Countrywide it turned out to be the wettest September since 2000.

There were the first signs of visible migration this month. Eighteen Swifts were reported flying over on 1st and three were over the Lagoon on the same date - these birds the last sighting of the year and just four days later than last year. More than 70 House Martins passed through on the same date with smaller numbers on several dates. Swallow numbers were rather lower with a best count of 19 on 15th. Six Sand Martins over the Lagoon on 1st were the last of the year - 11 days earlier than last year. A Yellow Wagtail was reported flying south over the Reserve on 1st. Small numbers of Meadow Pipits were seen flying over in a southerly direction on several dates with a total of 27 counted on 28th.

Tim's Field and roadside fences are worth checking at this time of year for Stonechats, Whinchats and Wheatears moving through but results were disappointing this time with just a single Whinchat on the field on 7th and one Wheatear flying over Mike Fisk Meadow on 15th. One or two Linnets were reported on Tim's Field with 11 there on 29th, these hopefully staying for the seed crop.

Other summer visitors were still much in evidence with regular sightings of Blackcap, Willow Warbler and Chiffchaff, the latter reported still singing as late as 29th. Common Whitethroats though had apparently departed early with no sightings reported - which is unusual. A Garden Warbler was in the Coppice on 8th. The last Reed Warblers were also recorded on 8th - the same date as last year.

The Great White Egret was still the highlight on the wetlands with sightings most days but it could easily be missed, alternating as it did between the wetlands and the canal. Its smaller cousin the Little Egret was hard to find this month with just a single sighting on the Wet Grassland on 25th. A male Mandarin Duck seen on the Reedbed and Lagoon on 22nd was another nice record. The first Wigeon typically start to arrive in September and four were reported on the Lagoon on 18th. Birds were seen daily thereafter with seven on 25th. Gadwall numbers started to build with several counts of between 60 and 70 birds and a best of 142 during a WeBS count on 15th proving to be the highest ever count on the Reserve - the previous best being 132 in October 2016

At the other end of the scale, after a blank month in August, two Tufted Ducks were on the Lagoon on several dates. A few Teal were on the Duck Marsh most days with a best count of 10. One or two Shovelers were

present from 8th. It was a much better month for sightings of Water Rails with birds seen most days from the middle of the month, the Wet Grassland being the most productive area. Snipe too were rather easier to see during the same period with up to three reported on the Duck Marsh. Other waders though were rather less evident with just a single Green Sandpiper on 22nd. Kingfishers were seen daily.

Other sightings this month included a Goldcrest on five dates, a Treecreeper on the Willow Path on two dates, one or two Grey Wagtails on four dates, a Raven flying south west on 14th and a Skylark on the farmland on 29th. Barn Owls were less easy to see this month but two were spotted coming out of the nest box shortly after 7.30pm during a Bat Night on 21st. Raptor-wise, Common Buzzards were recorded on nine dates with as many as four together; a Peregrine Falcon was seen on three dates and a Hobby was over the farmland on 14th. Red Kites are regular visitors during meadow and farmland cutting but can be surprisingly hard to find at other times. There were reports of a single bird on just two dates this month.

Daytime sightings of Otters are infrequent so to have one on three dates in one month from the river bridge was unusual. Less welcome was an American Mink on the Wet Grassland on 28th.

Canada Geese numbers on the Lagoon had reached around 80 by the middle of the month but there few sightings on the farmland due to a cull taking place further up the valley. Greylag numbers were much lower with no more than 19 birds reported and no sightings at all after 15th.

October

A very grey, wet day on 1st rather set the tone for much of the month. There were a few pleasant sunny days to bring out some late butterflies but there was a lot of rain with temperatures often struggling to get into double figures. As a result the river ran very high throughout the month. Night temperatures were low with white frosts on the few clearer nights. The month did end on a drier note with several fine days with good sunny spells.

With the river so high Kingfishers spent a lot of their time fishing on the wetlands and there were plenty of sightings, one even perching on the new Kingfisher nesting bank which was in course of construction on the Duck Marsh. Prospects of spotting an Otter on the wetlands also improve in these conditions and there were several reported sightings.

Unfortunately, the same applies to a less welcome visitor, the American Mink and there were sightings on three dates with two on a couple of occasions.

As regards wildfowl, the few early Wigeon had moved on by the end of September but a female was on the Duck Marsh on 23rd and four birds arrived on the Lagoon on 30th. Tufted Duck numbers remained low but there were more sightings this month and up to six birds on several dates. Shovelers were hard to find with just three on the Reedbed on 5th. Four female Goosanders were on the Lagoon on 13th. Teal tend to favour the shallower water bodies and with the Duck Marsh, Reedbed and Wet Grassland all kept low for habitat management work sightings were few and far between. A best count of just four was the lowest ever October count. It was Gadwall that took the limelight this month with several 100+ counts and a best of 127 on the Lagoon on 9th.

The low water levels certainly suited a Green Sandpiper which was seen daily from 12th to the end of the month with most sightings on the Duck Marsh. This was also the best place to see Water Rails with plenty of sightings and up to three birds reported. It was a poor month for Snipe though with sightings reported on just five dates and no more than two birds but a Jack Snipe on the Wet Grassland on 5th was a nice record.

The Great White Egret was around throughout the month, alternating between the Reserve and the canal, probably spending rather more time at the latter site. Little Egrets though were conspicuous by their absence.

The first winter thrushes were reported on 5th with nearly 800 Redwings flying over in a westerly/south westerly direction. Even bigger numbers were recorded on 20th with 1,700 birds logged flying over. A few birds did drop in to refuel and on 30th one was seen drinking at the water feature in the Bee Garden by the Visitor Centre. The first small flock of around 30 Fieldfares flew over in a southerly direction on 19th and the next day 460 birds were counted with smaller numbers on 30th. A Brambling in the container area on 6th was a rather less expected winter visitor.

The first of the autumn "V" formations of Pink-footed Geese passed high over the Reserve in an easterly direction on 6th and there were several more sighting through the month with as many as 300 birds counted on 19th. Twelve Whooper Swans were also spotted circling the Reserve then continuing east on 5th.

The few remaining summer visitors had gone by the middle of the month, the last three Swallows being reported on 13th and the last House Martin on 6th. Chiffchaffs were seen on several dates up to 19th, some of these possibly overwintering birds.

Other sightings this month included a Grey Wagtail on the Wet Grassland on 5th, a Coal Tit on 16th - an infrequent visitor here, a Stonechat on Tim's Field on three dates, Goldcrests on six dates with up to three seen, a Treecreeper on the Willow Path on two dates and a "Nordic" Jackdaw on three dates. Birds recorded flying over included small numbers of Skylarks, Siskins, Meadow Pipits and 12 Chaffinches on one occasion.

There had been no reports of Cetti's Warbler since March but one was photographed on the Duck Marsh on 26th and the following day there were further sightings on the Duck Marsh and Wet Grassland. Lapwing numbers have been declining in recent years so a flock of 60 on the farmland on 2nd was a welcome sight. The same can be said of Starlings and a flock of around 100 on 30th was only the third record since the beginning of June.

The return of Tree Sparrows to the feeders in the Bee Garden was nice to see. The first two arrived on 5th. Birds then visited daily, numbers reaching nine on 28th - these the first records since November last year.

Barn Owl activity on the Scrubland was limited to early morning, one hardy volunteer braving the elements to record one and occasionally two birds on several cold, dark mornings. A bird started roosting in the thatched gazebo again towards the end of the month. It was a good month for Sparrowhawk sightings with five together over the farmland on 30th. A Peregrine Falcon was reported on two dates, Common Buzzard on four dates with four birds on two occasions and Red Kite on five dates with two on one date.

With the continuation of the goose cull on local farmland numbers remained low until the last week of the month. There were then two 100+ counts of Greylag Geese on the farmland - 126 on 30th and 165 the next day - these the highest ever October counts.

November

It was another very wet month with day after day of grey skies, particularly in the early and latter parts. High pressure did finally take over and the month ended with two lovely sunny but very cold days.

There were no reports of the Great White Egret this month and the main highlight on the wetlands was the immature Scaup that arrived on the Lagoon on 10th and was present for the rest of the month. However, wildfowl numbers generally were very disappointing. After a very good month in October a best count of just 30 Gadwall was the lowest for November since 2009. Teal numbers showed no sign of increasing with no more than seven on the Duck Marsh the lowest ever November count. Mallard too had their lowest ever November maximum of just nine birds. No more than five Wigeon could be seen on the Lagoon. Tufted Duck numbers remained low but did reach nine on 30th. It may well be that with so much rain and so many areas of waterlogged farmland the ducks were rather more spread than they would normally have been.

Among the other ducks, a male Pochard was on the Lagoon from 9th to 12th; a male and female Shoveler were there on 9th and a Goldeneye on 10th. A few Goosander started to come onto the Lagoon later in the day in the latter part of the month with six on 24th.

It was another disappointing month for Snipe with just one report of a single bird on the Wet Grassland on 2nd but a Green Sandpiper was again present throughout the month. Water Rails were rather harder to find with single birds seen on just three dates. There were more reports of Cetti's Warbler this month - on the Duck Marsh on 2nd and the Wet Grassland on 9th.

With the river again very high throughout much of the month there were plenty of Kingfisher sightings on the wetlands with a bird even seen on the Dipping Ponds and Education Pond. There were more Otter sightings too - on the Duck Marsh and Lagoon on 2nd and 6th. Footprints and spraint were found on the banks of the Fish Pass on 12th.

Other sightings this month included Goldcrests on six dates with up to eight birds reported, Treecreepers on four dates, a Coal Tit on two dates, a Grey Wagtail on two dates, a female Blackcap on John Ackroyd Meadow on 3rd and a Chiffchaff in the Coppice on 24th. Tree Sparrows continued to be daily visitors to the feeders in the Bee Garden, numbers reaching 11 on 17th. A Rook there on 20th was an unexpected sighting, as was a Ring-necked Parakeet over Tim's Field on 17th.

Winter thrushes continued to pass through with small numbers of Redwings on several dates, a few dropping in briefly. Up to three Fieldfares were seen on the farmland on three dates and around 50 flew

over on 24th. Other winter visitors flying over included 37 Whooper Swans on 16th and V-formations of Pink-footed Geese on 3rd (around 110) and 30th (120). On Tim's Field Linnet numbers reached 50 or so on 17th but otherwise no more than 30 were reported. Reports of up to 15 Chaffinches in this area may well have been winter visitors.

Two Peregrine Falcons were seen on the farmland on 13th but weather conditions for the larger raptors were far from ideal. There was just one report of a Common Buzzard and Red Kites were only seen on two dates. Despite the generally wet conditions a Barn Owl was seen at the nest box on the Scrubland early in the day on several dates and one roosted overnight in the thatched gazebo throughout the month, leaving numerous pellets.

A surprise sighting this month was that of several very late Pipistrelle Bats on the Willow Path at dusk on 24th. This followed sightings of single individuals on 16th and 20th.

December

After a very pleasant start to the month with plenty of sunshine low pressure again took over bringing more heavy rain and strong winds. It was generally quite mild apart from a couple of days around the middle of the month when temperatures plummeted with prolonged wintery showers and snow on 15th. However, milder conditions soon returned and the month ended with a dry though rather grey and murky New Year's Eve after a bright start.

Unusually, the main focus of interest for the birdwatchers this month was the roadside by the river bridge. On 1st there was a rare daytime sighting of a Tawny Owl in a small area of shrubs and trees near the riverbank. Goldcrests were very active in the same area this month with as many as four in the big alder overhanging the river just upstream from the bridge. However, a Firecrest which appeared close by on 14th was the real bonus. Though often elusive, the bird was seen on a number of occasions up to the end of the year, providing some good photo opportunities. Still in the same area, a Dipper that flew under the bridge on Boxing Day was the first record since 2nd July 2018.

With no sign of a sustained cold snap duck numbers were generally on the low side but both Teal and Gadwall had better months with 24 Teal the highest count of the year and 59 Gadwall the highest December count since 2011. But most other species were hard to find with no more than

11 Tufted Ducks on the Lagoon. Interestingly, the best duck counts were made later in the afternoon. Goosanders typically start to gather on the Lagoon towards dusk, numbers reaching 11 on a couple of dates. The immature Scaup was last seen here on 15th. A Black Swan on the Lagoon on 26th was the first sighting of this escaped species since 23rd July 2016. The bird was present to the end of the year, alternating between the wetlands and the farmland where it associated with the geese flocks.

Still on the wetlands, there were a few more reports of Snipe this month with four on the Wet Grassland on 15th the best count. There were more records too of Water Rails with the Reedbed and Duck Marsh the most productive sites. A Green Sandpiper was seen on 14th and 15th. There was again plenty of Kingfisher activity, the Wet Grassland and Reedbed producing most sightings but one was also seen on one of the Dragonfly Ponds. Cetti's Warbler was typically elusive but a bird was heard on the Duck Marsh on 21st and by the Lagoon on 26th. There was not as much Otter activity as last month but one was seen on the Lagoon on 14th, shortly afterwards making its way onto the river.

Linnet numbers on Tim's Field were low throughout the month with a best count of just 35 but often less than half that number. However, over the Christmas period a flock of around 20 Chaffinches provided some interest along with a few Reed Buntings.

Other sightings included a Treecreeper on two dates, a Grey Wagtail on the Wet Grassland on two dates, a Coal Tit on two dates, a Lesser Redpoll on three dates, a Woodcock on four dates, four Siskin in a Silver Birch by the Manager's Garden on 15th and a Chiffchaff in the Coppice on 22nd. A Collared Dove by the Visitor Centre on Boxing Day was only the second record of the year.

Song Thrushes, absent for most of the autumn, suddenly start to appear again in December. One was seen feeding on Guelder Rose berries in the Bee Garden on 3rd and there were regular sightings from that point. On 29th one was singing in the Coppice. Among the other thrushes up to four Mistle Thrushes were reported; odd Fieldfares were seen on a few dates and on 18th December 26 were counted in a tree at the edge of Mike Fisk Meadow. Redwings were reported on a number of dates. Up to 50 were on the farmland and on 22nd at least 22 were in trees in the Manager's Garden. On 29th 16 were seen on Poplar Field.

It was a good month for the smaller raptors, Sparrowhawks in particular. Three were seen together over the Wet Grassland on 22nd. A Kestrel was

seen on four dates, on one occasion attacking one of two Sparrowhawks over Mike Fisk Meadow. A Merlin over Tim's Field on 26th was the first confirmed sighting of the year. Peregrine Falcons were reported on three dates with two over the farmland on 15th. It was bit better month for the larger raptors with Red Kites on five dates and Common Buzzard on five dates with two on three occasions.

Two Barn Owls quartered the Scrubland early in the day on 20th and at least one bird again roosted in the thatched gazebo throughout the month, leaving numerous pellets and a huge amount of mess on the benches!

Despite the goose cull on local farmland there were some large gatherings on the field this month with Canada Goose numbers reaching 155 and Greylag Goose 149.

Thanks to the very wet autumn, drying out the Wet Grassland for its annual cut had proved almost impossible this year. However, much of the work was done with great care and water levels were restored around the middle of the month. On the Duck Marsh work was completed on the new Kingfisher nesting bank. Hopefully, this will have some lodgers next spring.

Introduction to the Systematic List of Birds

The bird's name is followed by the Latin name and a description of its status on the Reserve. In order to do this, each bird has been placed in one of the following categories:

Resident	A species which is found on the Reserve throughout the year.
Common	A species which is present regularly or in large numbers but not necessarily all year.
Uncommon	Occurs most years but only on a few days or in low numbers
Scarce	Has occurred more than 10 times but not on an annual basis.
Rare	Has occurred fewer than 10 times.
Passage	Seen when moving between winter and breeding areas elsewhere.
Migrant	Generally only present for a short time, usually on passage.
Visitor	Usually present for more than a day at any time.
Casual Breeder	Has bred irregularly on the Reserve and is likely to do so again.
Escaped Species	Used where there is a possibility that some (but not necessarily all) records of a species refer to birds that have escaped from captivity.

The observer's initials appear in brackets after some records.

Abbreviations used in the Report:

BTO British Trust for Ornithology

c approximately

et al and others

RNR Rodley Nature Reserve

WeBS BTO Wetland Bird Survey

YNU Yorkshire Naturalists Union

Systematic List of Birds Recorded

Mute Swan *Cygnus olor* Resident Breeder

In 2017, most unusually, both resident pairs failed to produce any young. Things were looking rather better last year, the Duck Marsh pair having six cygnets and the Wet Grassland pair five (the female of this latter pair a yellow ringed bird no.232). Then, strangely, after 24th June the Wet Grassland family disappeared and by 8th July the Duck Marsh family too had gone, leaving one solitary cygnet on the Lagoon. Foul play was suspected but on 3rd August the Wet Grassland family was back on the Reedbed but now with just three cygnets and one of these disappeared towards the end of September. On 3rd December the remains of a juvenile were found near the Fish Pass. One or two adults were present from the beginning of this year with up to six on occasions. Yellow ringed female 232 was on a nest at the eastern end of the Wet Grassland from early April and a bird was subsequently noted at a nest on the Duck Marsh but both failed to produce any young. At least two adults remained on the wetlands throughout the rest of the year with four on occasions and a single ringed juvenile bird was seen on several dates from the end of September to the end of October.

Whooper Swan *Cygnus cygnus* Passage Visitor

Birds that have overwintered further south are occasionally recorded in March on their way back to their breeding grounds in Iceland. However, a flock of 30 birds that flew over the flooded farmland on 24th March was heading in a south westerly direction (JWC). On 31st March 42 birds were recorded flying over the Reserve (JWC). Autumn sightings are less common here but there were two this year. On 5th October 12 circled the Reserve before flying off in an easterly direction and on 16th November 37 flew over the Lagoon and then east (JWC).

Pink-footed Goose *Anser brachyrhynchus* Passage Visitor

These birds breed predominantly in Iceland and in smaller numbers in Greenland. The wintering grounds are almost entirely in Britain. Large skeins pass high over the Reserve in the autumn and winter months and occasionally the odd bird will turn up on the farmland among the other geese. On 19th January more than 300 flew over in a westerly direction and on the same date a single bird was on the farmland (AL/PA *et al*). The following day 63 flew over in the same direction and on 26th January a further 40, again going west (JWC). There was a large movement of 520 birds flying west/north west on 16th February and a further 52 on 23rd February (JWC). The first two flocks of the autumn flew over in an easterly direction on 6th October - 32 and c100 (MB/BM *et al*). There were further

movements on 19th October - c300 (JWC *et al*) and on 27th October - 200+ (AL/PA) - all heading in an easterly direction. Flocks were reported on two dates in November - c110 on 3rd flying south (JWC) and c120 on 30th flying west (JB). In December seven birds flew over in a westerly direction on 21st (JWC).

Greylag Goose *Anser anser* Resident Breeder/ Winter Visitor

A count of 245 on the farmland in December last year was the highest ever for that month. Numbers remained high into the New Year with 100+ counts daily and a report of c200 on 19th (DC/EC *et al*) the highest ever for January. On 3rd February a count of 192 (PM) was the highest ever for that month. There has certainly been a dramatic increase in numbers since November 2014 when the first three figure count was made. Numbers started to fall in the second half of February but 64 on 3rd March (DC/EC) was still the joint highest ever for March. A white leucistic bird was seen on several occasions last year and one was found dead in the open Mike Sheldon Hide on 25th March - probably the victim of a Fox. One or two pairs usually stay to nest on the wetlands and two goslings were seen on the Lagoon on 24th April (DC/EC). On 28th April an adult and three goslings were on the middle island on the Lagoon (PM/BM) and on 24th May two adults were seen with goslings on the road near the Lagoon (JB/MB). Numbers started to build on the farmland again in October, reaching a record 165 for that month on 31st (PM). However, the number of sightings went down considerably in November, almost certainly due to disturbance as a result of a cull on local farmland, but there were, nevertheless, sightings of at least 120 birds on two occasions. A count of 149 on the farmland on 11th December (PM) was rather lower than last December but was, nevertheless, the second highest ever for that month. Monthly maxima are shown below (adults only).

J	F	M	A	M	J	J	A	S	O	N	D
c200	192	64	36	32	-	10	4	19	165	120	149

Canada Goose *Branta canadensis* Resident Breeder/Winter Vis.

There were numerous 100+ counts on the farmland in January with c200 on 19th (DC/EC) the highest ever count for that month. Numbers remained high in February and March with 120 on the river on 27th February (DC/EC), 130 on 3rd March (DC/EC) and 116 on 24th March (WeBS). A few birds remained throughout the spring and summer and one or two pairs nested on the Reserve. On 27th April a gosling was killed by a crow on the Lagoon (JB). On 18th May two adults and three goslings were seen on the entry road (DC/EC) and the following day two goslings were seen

on the bank between the Duck Marsh and Lagoon (WeBS). Numbers started to build on the farmland in August, reaching 62 on 12th (BM) and in September up to 70 were reported on the Lagoon. However, a cull on local farmland kept birds on the move and in October and November no more than 12 were to be seen on the Lagoon most days. On 17th November around 100 flew off the Wet Grassland early in the day (WeBS) and towards dusk the same day a similar number flew back onto the Reserve from the farmland. Most reports in December were of no more than 60 birds but a count of 155 on the farmland on 18th (PM) was the joint second highest ever for that month - just seven less than December last year. Monthly maxima are shown below (adults only).

J	F	M	A	M	J	J	A	S	O	N	D
c200	126	130	70	29	10	8	62	81	60	c100	155

Barnacle Goose *Branta leucosis* **Rare Visitor / Escaped Sp.**

There were again no records this year. A single bird seen on the farmland during an early morning WeBS count on 18th April 2010 was the first record since 26th April 2003 and only the second for the Reserve.

Dark-bellied Brent Goose *Branta bernicla* **Rare Visitor**

This was a new bird for the Reserve in 2016 - a single bird found on the farmland with other geese on 13th November. There have been no sightings since this date.

Egyptian Goose *Alopochen aegyptiaca* **Rare Visitor**

Feral populations of this species occur in parts of Britain and on the Continent. It was a new bird for the Reserve in 2018 - a single bird picked out among the Greylag Geese on the farmland on 4th March. There were no subsequent sightings.

Common Shelduck *Tadorna tadorna* **Scarce Visitor**

This is an infrequent visitor to the Reserve. Last year there was just one record of a bird flying high over the Reserve in October. This year there were sightings on two dates. On 20th January a female was on the Lagoon briefly (JWC *et al*) and on 16th February two flew over the farmland in an easterly direction (JWC).

Mandarin *Aix galericulata* **Rare Visitor**

With a substantial feral population at Harewood Park it is perhaps surprising there have been so few sightings at Rodley. First recorded here in 2009, there was one sighting in 2014, four in 2017 and one in 2018. All

sightings had been in March or April. This year there was one record - a bird on the Reedbed on 22nd September (JWC). Later the same day it was seen on the Lagoon being pursued by three aggressive Coots (PM/JB). Needless to say, it didn't stay.

Wigeon *Anas penelope* Winter Visitor

These winter visitors tend to drop in and fairly quickly move on. This was clearly demonstrated last January when 22 were on the Lagoon on one date and just a handful the next day. The best January count this year was rather lower - 10 on 2nd. There were then just two further sightings that month. From 10th February to the middle of March there were regular sightings on the Duck Marsh and, surprisingly, none on the Lagoon but none involved more than four birds. A pair of birds on the flooded farmland on 17th and 18th March looked like being the last of the spring but a male then arrived on the Lagoon on 11th May and was present until the next day (JWC *et al*). Four birds on the Lagoon on 18th September (MG/PG) were the first of the autumn, numbers reaching seven on 25th September (PA). There were no records in October until 23rd when a single female was on the Duck Marsh (PM). Maximum counts in the last three months of the year were disappointing with a best of just five on 24th November (JWC). In December four were present on a couple of dates but there was just a single bird on the Lagoon from the middle of the month. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
10	3	4	-	1	-	-	-	7	4	5	4

Gadwall *Anas strepera* Resident Breeder

Numbers in January were the lowest for that month since 2010. They increased considerably in the first week of February, a count of 60 on 3rd including 47 on the Lagoon (PW). This was the highest ever February count but numbers then dropped back again for the remainder of the month to less than half that number. They increased for a time from the middle of March with 63 attracted to the flooded farmland on 18th (PM/BM) and 66 on the wetlands on 24th (WeBS) - these the highest ever March counts. The first family of four ducklings appeared on the Duck Marsh on 29th May (DC/EC). A family of eight was on the Lagoon on 16th June (MG/PG) and on 2nd July there were reports of families of three and eight ducklings on the Wet Grassland. Fewer pairs nested successfully than in 2018 when as many as seven families were seen on the Lagoon in June. Numbers of birds started to build in September, reaching a record 142 on 15th, 129 of these on the Lagoon and Duck Marsh (JWC). They remained

high in October with 106 on the Lagoon on 2nd (PM) and 127 there on 9th (PM/BM) but dropped back sharply in November with a maximum of just 30 on the Lagoon. There was some improvement in December, a count of 59 on 26th being the highest for that month since 2011. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
13	60	66	42	26	20	35	73	142	127	30	59

Pintail *Anas acuta* Rare Visitor

First recorded in 2011, there were sightings in 2012 and in each of the three years from 2016 to 2018. There were no records this year.

Teal *Anas crecca* Winter/Passage Visitor

Counts were very low in all months. The best January count of 20 on 27th (JWC) was the lowest for that month since 2005. Another count of 20 (all on the Wet Grassland) on 13th February (DC/EC) was the highest for that month and the joint lowest since 2005. A single bird on the Duck Marsh on 24th April was the last of the spring. There were no sightings in May or June and none in July until 27th when a single bird appeared on the Duck Marsh. Up to five were on the Duck Marsh in August and 10 in September but no more than four were recorded in October and seven in November - these the lowest ever best counts for those months. Levels on the Duck Marsh and Wet Grassland were kept deliberately low in the autumn for habitat management work and this was clearly a contributory factor. Water levels were restored in December and this brought in a few more birds with 24 on 28th (JWC) the best count of the year. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
20	20	15	12	-	-	1	5	10	4	7	24

Mallard *Anas platyrhynchos* Resident Breeder

January last year produced a record count for that month of 90 birds. Numbers this January were very much lower with a best of just 22 on 20th (WeBS). Numbers in February and March were very similar. A best count of just 10 in May was the lowest for that month since 2003 but there were, nevertheless, several reports of successful nesting. The first family of three ducklings was on the river on 19th May (WeBS). What may have been the same family was seen on the Wet Grassland and Duck Marsh just a few days later. A family of eight ducklings was seen in the Reedbed

on 23rd June (DC/EC) and just two ducklings were on the Lagoon on 26th June. On 2nd July a female and 10 ducklings were on the Wet Grassland (PM/BM). A count of 45 on 13th October (WeBS) was the highest for that month since 2012 but numbers plummeted to single figures in November, a best count of nine being the lowest ever for that month. Flooded fields further up the valley - the result of a very wet autumn - attracted good numbers of ducks and this may well have been where many of our wildfowl went. Numbers in December during the day were very low but there was some improvement towards dusk with more birds flying onto the Reserve and particularly the Wet Grassland, a count of 18 here on 29th (JB) being the highest of the month. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
22	24	26	19	10	26	76	46	38	45	9	18

Garganey *Anas querquedula* Scarce (Summer) Visitor

In 2018 a male bird spent 11 days on the Reserve from 4th to 14th April. Prior to this the species had only been recorded in 2003, 2006, 2014 and 2015. There were no sightings reported this year.

Shoveler *Anas clypeata* Winter/Passage Visitor

There were no sightings in January and two birds on a largely frozen Lagoon on 2nd February (PA *et al*) were the first of the year. There were just two further records in February - a male and female on the Wet Grassland on 17th (WeBS) and on the Duck Marsh on 20th (JWC). There was only one record in March - a male and female on the Lagoon on 2nd (JWC) and again in April - a male and female on the Lagoon on 17th (DC/EC). The first bird of the autumn arrived on the Duck Marsh on 8th September (JWC) and there were then reports of one or two daily to the end of the month, usually on the Lagoon. On 5th October three were on the Reedbed and the following day seven were seen over the wetlands (JWC). There were no further sightings until 9th November when a male and female were on the Lagoon (JWC) - this the only record of the month. A male was on the Lagoon on 4th December (PM/BM) and a male and a female on 21st (JWC) but these were the only sightings of the month. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
-	2	2	2	-	-	-	-	2	7	2	2

Pochard *Aythya ferina* Winter/Passage Visitor

There had been no double figure counts since 2014 but there was some improvement this year. A few birds were on the Lagoon every day from the beginning of the year until 24th February and the first double figure count of 11 came on 12th January and included nine males (MG/PG). There were numerous subsequent reports of 10 or 11 birds with the large majority males. There were no sightings in March but a male and female were on the Lagoon on 13th April (PA) and there were further reports of one to three birds over the following few days. The first bird of the autumn was a single male on the Lagoon on 9th November (JWC) and what was probably the same bird was seen on 10th and 12th November. However, there were no further sightings to the end of the year. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
11	11	-	3	-	-	-	-	-	-	1	-

Tufted Duck *Aythya fuligula* Casual Breeder and Winter Visitor

The best counts of the year came in the second half of January and always towards dusk. On 27th 20 were on the Lagoon (PM/BM). On 30th much of the Lagoon was frozen over but 14 were on the few ice-free areas and a further 15 were counted on the river (PM/BM), this the highest January count since 2013. A report of 20 on the river on 3rd February (MHa) was the highest for that month. Numbers dropped after this and there were only two more double figure counts in the next three months, a best of nine in March being the lowest ever for that month. Up to and including 2009 several pairs nested on the Reserve but there had only been one successful nesting attempt since and that was in 2015. There was again on evidence of nesting this year and for the first time ever there were no sightings at all in August. Two birds returned to the Lagoon on 8th September and on 30th November nine were counted there (PM/BM). A count of 10 on 4th December (PM/BM) was the highest since May but in the absence of a sustained cold snap there was little further improvement with just 11 on two dates the highest (JWC *et al*). Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
29	20	9	12	15	8	4	-	2	6	9	11

Scaup *Aythya marila* Rare Visitor

In 2014 a female arrived on the Lagoon on 1st February and was present almost daily until 9th March. Prior to this there had been just two records

in 2000. There were no records from 2015 to 2018. This year an immature bird arrived on the Lagoon on 10th November (JWC) and was seen most days until 15th December.

Common Scoter *Melanitta nigra* **Rare Visitor**

Large numbers of this species winter around our shores and there is also a very small Scottish and Irish breeding population. A female or immature bird seen on the Lagoon on 21st March 2016 was the first ever record for the Reserve. There have been no sightings in the last three years.

Goldeneye *Bucephala clangula* **Winter Visitor**

February and March are usually the best months to see this diving duck on the Lagoon but numbers in the early part of last year were the lowest since 2014. There was a distinct improvement this year with the highest ever counts in January and February. Birds were present daily from the beginning of the year with a count of eight on 13th January (AL/PA). On 3rd February a report of 16 included nine on the Lagoon and seven on the river (PW). Interestingly, 13 of these were females. On 23rd February nine of a group of 15 birds flying east dropped onto the Lagoon (JWC). Up to seven could be seen on the Lagoon in March and a few were still present into April. A male and female on 10th April were the last of the spring. The first bird of the autumn arrived on the Lagoon on 10th November (JWC) but didn't stay and there were no further sightings to the end of the year. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
8	16	7	5	-	-	-	-	-	-	1	-

Bufflehead *Bucephala albeola* **Rare Visitor**

This North American duck is a rare vagrant to Western Europe. On 11th May 2017 a female was seen and photographed on the Reedbed. The bird stayed until 14th May and was recorded during a WeBS visit that morning. The bird was ringed and had a tag on the other leg but was it a wild bird or an escapee?

Goosander *Mergus merganser* **Common Visitor**

Birds gather on the Lagoon towards dusk in the winter months and there were several double figure counts in January this year with the best 13 on 16th (PM/BM). However, rather surprisingly, the highest counts were made early in the day with 15 on 5th January (JWC), 13 on 27th and 18 on 30th (DC/EC) - this the best January count since 2014. (The record January count of 41 was made in 2010). A report of twelve birds on 3rd February

included eight on the river (DC/EC). Five males were on the Lagoon on 15th April (DW) but there were only five further records in the next three and a half months. One of these was a group of 11 birds flying west over the River Path on 28th July (JWC). Unusually, there were no reports of family parties on the river this year and neither of the two nest boxes on the riverbank were used. However, there were reports of small groups of up to seven birds flying over which could well have included juveniles. A few started to gather on the Lagoon towards dusk in the latter part of November and on 4th December 11 were counted (PM/BM). There was a further report of 11 on 15th (PM/JB) but most days less than half that number. The maximum daily count for each month is shown below.

J	F	M	A	M	J	J	A	S	O	N	D
18	12	7	5	2	-	11	7	3	4	6	11

Ruddy Duck *Oxyura jamaicensis* **Now Rare**

The national cull of this species was very successful and there have been no sightings since 16th May 2009. Birds bred on the Reserve in 2004, 2005 and 2006.

Red-legged Partridge *Alectoris rufa* **Rare Visitor**

There have been no sightings since 24th April 2012.

Grey Partridge *Perdix perdix* **Casual Breeder**

Small releases of birds have been made on the Reserve in the past, the last in 2017. In 2018 there were a number of sightings including a family of three juveniles. However, sightings dwindled in the latter part of the year and there was just one this year - a single bird on the farmland on 15th February (JK).

Common Pheasant *Phasianus colchicus* **Resident Breeder**

This species continues to do very well on the Reserve, despite the healthy Fox population. It is a daily visitor to the Bee Garden throughout the year thanks to a plentiful supply of spilled seed under the feeders there. There were numerous reports of between seven and 10 birds under the feeders in the first three months of the year. The Fox population was particularly high this year which may well account for the lack of any reports of young until September. Last year the first juvenile appeared in the Bee Garden on 16th June and there were several subsequent reports of family parties. This year a female was seen with 10 young on 8th September (JB) and on 28th September a female was reported on Tim's Field with seven young (DC/EC) - these the only reports of more than one juvenile. Tim's Field

certainly provides good cover as well as seed in the autumn and winter months and at least 18 were counted flying off the field on 16th November (JWC), possibly disturbed by a Fox.

Cormorant *Phalacrocorax carbo* **Resident**

Birds can be seen on the pylon by the Fish Pass throughout the year and they are regular visitors to the Lagoon. Last year the best counts came in the first half of the year with as many as 12 on the Lagoon in February. This year the best counts were in the second half of the year. Up to five were on the Lagoon in the first part of the year and no more than four on the pylon at any one time. August produced some good counts with 12 on the Lagoon on 7th (JWC), eight on the pylon on 24th and nine there on 26th (DC/EC). Twelve were recorded during a WeBS count on 15th September. One of these, an immature bird, was seen to clip power lines and drop like a stone into the river. On 24th October 13 were reported on the pylon (JB), this the highest count of the year. Numbers dropped somewhat in the last six weeks of the year. The highest counts each month are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
6	6	3	5	7	8	6	12	12	13	8	6

Bittern *Botaurus stellaris* **Rare Visitor**

One spent several weeks in the Reedbed and on the Duck Marsh from 16th January 2016. It was last seen on 26th April that year. There have been no sightings since then.

Great White Egret (*Ardea alba*) **Rare Visitor**

Just like the Little Egret this species is gradually extending its range northwards and it was only a question of time before one would turn up on the Reserve. Last year there was a report of one flying over the Reserve on 9th December but this summer there were sightings of a bird a few miles further along the canal. On 25th August what was probably the same bird turned up on one of the tern rafts on the Lagoon (JWC). There were further sightings on the Lagoon over the next three days, the bird moving between the canal and the Reserve and often disappearing for hours on end. There were regular sightings throughout September, the bird being seen on all four main wetland areas but it was again very mobile, spending much of its time away from the Reserve along the canal. It was still present throughout much of October and was last reported on 28th fishing on the canal just beyond the Ring Road (PM/BM).

Little Egret (*Egretta garzetta*) Common Visitor

The number of sightings has increased dramatically since 2016 but last year was a bit disappointing compared to 2017 with birds only recorded on 32 dates. Last year we also had to wait until 2nd July for the first sighting. This year there were reports of a single bird on several dates between 26th January and 2nd February. There were no further sightings until 4th March when one was on the Duck Marsh. After this one was seen on the wetlands most days. On 18th May four were on the Wet Grassland for a time (RAH/JWC) but only one was seen subsequently with two on occasions. On 2nd July four were back - on the Reedbed this time (PM) but only for one day. The Duck Marsh produced most sightings throughout the rest of July with four there on 6th (JK), three on 17th and four on 24th (DC/EC). One and occasionally two birds continued to be seen most days throughout August but there was just one sighting in September - a single bird on the Wet Grassland on 25th (DC/EC) - this the last sighting of the year.

Grey Heron *Ardea cinerea* Resident

Birds are present daily throughout most of the year and most years produce at least one double figure count. Last year we had to wait until December for that to happen, 14 being recorded on 29th December. This year 10 settled on the farmland on 5th January, having been disturbed by a helicopter (JWC). This proved to be the only double figure count in the first half of the year. The Duck Marsh and trees behind are always popular. Six were seen here on 12th January (MG/PG) and seven on 25th March (JB). Numbers were at their highest in July and August. Ten were reported flying over the Reserve on 31st July (MHa) and nine were in the air together on 26th August (JWC). Counts on the Duck Marsh and trees in the same period included eight on 4th August (WeBS) and eight again on 21st August (DC/EC). The wetlands inevitably produce most sightings but early and late in the day one or two birds regularly visited the Dipping Ponds and Dragonfly Ponds to fish. On 4th October nine were counted on the Duck Marsh and in trees behind (PU). Most unusually, there was just one record in November and that was of two birds on the farmland. It may be that birds had dispersed to feed on flooded farmland further up the valley following an exceptional amount of rain in the previous weeks. There were sightings most days in December but no more than three birds were recorded. The highest counts each month are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
10	2	7	3	3	5	10	11	7	9	2	3

Little Grebe *Tachybaptus ruficollis* **Resident Breeder**

These birds are often hard to find on the wetlands at the start and end of the year. This year there was just one sighting of a single bird on the Lagoon in January, despite the wetlands being ice-free for most of the month. Up to three were seen on the river in the same period. On 16th March a count of nine included six on the river and three on the wetlands (JWC) but apart from this there were no other reports of more than four birds in the first five months of the year. The first family appeared on the Duck Marsh on 26th May - two days earlier than last year - an adult with four chicks (DC/EC). On 2nd July an adult was seen with four chicks on the Lagoon (PM/BM). Disappointingly, these were the only two families recorded this year and numbers of adults in every month from July to November were lower than last year. Monthly maxima are shown below (adults only).

J	F	M	A	M	J	J	A	S	O	N	D
4	4	9	3	2	6	4	13	9	8	4	3

Great Crested Grebe *Podiceps cristatus* **Summer Visitor/ Breeder**

Birds typically arrive on the Lagoon in February and depart around August and it was the same again this year, the first bird being reported on 20th February (JWC *et al*). It was joined by a second bird on 27th February and as in previous years a nest was constructed at the back of the middle island on the Lagoon in April. Last year four eggs were laid but only one chick was seen and several further unsuccessful nesting attempts were made. This year four chicks appeared in May. All four were still present up to 17th July but after that date only three were seen with the two adults. They were last seen on 28th July and presumably left the Reserve soon after this. There was one further sighting - an immature bird on the Lagoon on 24th August (JWC *et al*). There were no reports after this date.

Red Kite *Milvus milvus* **Common Visitor**

The number of sightings was well down on 2017 and 2018 but it may be that many now go unrecorded as this is such a common bird in the area. There were, nevertheless, sightings reported in every month of the year. Most were of one or two birds but on 20th February eight were seen in the air together over the Reserve (JWC). Grass cutting on the farmland is guaranteed to bring birds in to investigate and six were seen here on 1st June (JWC) and three on 22nd July (PM/BM).

Marsh Harrier *Circus aeruginosus* **Rare Visitor**

This species is only ever likely to be recorded as a flyover here at Rodley and last year there were three such records between 4th August and 21st September. There were no reported sightings this year.

Sparrowhawk *Accipiter nisus* **Casual Breeder**

This is a common bird on the Reserve with many sightings throughout the year. On 1st January a female was seen with a freshly killed pigeon on Tim's Field and there was plenty of evidence of successful hunts most months. The smaller males will usually target smaller prey and on 3rd March an immature male killed a male Reed Bunting under the feeders in the Bee Garden. On 14th April a male was seen with a Blackbird kill on the Duck Marsh (PA). Most sightings involved just one or two birds but three were seen together over the Scrubland on 6th October (JWC) and on 30th October five were in the air together over the farmland (JWC) - almost certainly a family party. On 22nd December three were seen together over the Wet Grassland (JWC).

Common Buzzard *Buteo buteo* **Common Visitor**

This is now a common bird in the area and there were sightings in every month of the year. Many were of just one or two birds but up to six were seen together some days. March, April and August proved to be the most productive months as regards number of sightings. Birds are now clearly nesting not far away but on 3rd April one was observed taking sticks to a nest in a tree on the far riverbank (PA *et al*). On 6th April as many as six birds were over the Reserve at the same time (JWC) and six were again recorded on 25th May (JWC). The next day two birds were displaying over Tim's Field and woodland across the river (PM/JB). Birds were often seen in the area near the nest in the following weeks and it seems nesting certainly took place - but with what result is unknown. There were several reports of up to four birds together over the Reserve in the autumn which may well have been a family party.

Honey Buzzard *Pernis apivorus* **Rare Visitor**

A new bird for the Reserve in 2012, one was photographed high over the Dragonfly Ponds on 13th June that year. There have been no records since then.

Osprey *Pandion haliaetus* **Scarce (Summer) Visitor**

There was just one record last year and one again this year - a bird flying south east over the Reserve at 12.30pm on 25th August (JWC).

Water Rail *Rallus aquaticus* Resident Breeder and Winter Visitor

There were numerous sightings in January with birds seen on all four main wetland areas and two birds on two occasions. They were rather harder to find in February with a single bird on just two dates, the last of these on the riverbank near the Dragonfly Ponds on 17th (WeBS). There was another sighting on the riverbank, this time two birds near the Fish Pass on 29th March (JB). There were no records in April and just one in each of May and June. On 27th May one was heard calling on the Wet Grassland (JWC) and on 24th June one was on the riverbank just below the bridge (JB). Juveniles are reported most years but not this time. There were just three sightings of a single adult in July and August. From 8th September there were regular sightings throughout the rest of the month on the Wet Grassland with two here on 18th (PA). From the beginning of October the Duck Marsh was the most productive site with reports most days and three together in a territorial squabble on 12th October (PW). These birds are often very elusive and the pig-like squeals are often the only evidence of their presence. These were heard frequently in November and December.

Spotted Crake *Porzana porzana* Rare Visitor

There have been just two records of this elusive bird. In 2005 one spent five days on the Wet Grassland from 1st October. Last year one again appeared on the Wet Grassland on 25th August and was recorded most days in the same area up to 2nd September, although it was typically hard to spot. There was one further sighting that year on 14th September.

Moorhen *Gallinula chloropus* Resident Breeder

A WeBS visit on 17th February produced a total of 17 birds but numbers most days were only half this. There were no further double figure counts until November. The farmland edge close to the river behind the bridge car park produces good counts in January and February most years but not this time. The first family of four young appeared on the Lagoon on 19th May (WeBS). The next family (just two young) was recorded on the Duck Marsh on 16th June (WeBS). A third family of three tiny young was seen in the Long Ditch at the Dragonfly Ponds on 24th July (SAC). Another WeBS visit on 17th November produced the best count of the year - 18 adults and four juveniles. Monthly maxima (adults only) are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
11	17	8	7	5	9	6	9	7	8	18	12

Coot *Fulica atra* Resident Breeder and Winter Visitor

After several years of falling numbers they rallied a bit in the second half of last year. However, numbers this year were very disappointing and in each of the first eight months they were lower than in 2018 and in several months the lowest since 2000, the first year of recording. However, the best counts came in February and March and a count of 16 on 17th February (WeBS) proved to be the highest of the year. Despite the low numbers there was some breeding success. The first family of four chicks appeared on the Wet Grassland on 4th May (DC/EC), more than two weeks earlier than last year. A family of seven chicks was reported on the Lagoon on 26th May (DC/EC) and a family of three was on the Duck Marsh on the same date. An adult and two chicks were on the Lagoon on 7th July (WeBS). Unusually, there were no sightings of Coots on the Wet Grassland or Reedbed after this date and only one on the Duck Marsh. In October and November no more than four were seen on the Lagoon. Six were recorded on two dates in December. Monthly maxima (adults only) are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
8	16	13	11	8	10	7	6	8	4	4	6

Common Crane *Grus grus* Rare Visitor

This was new bird for the Reserve last year when two were seen standing on the farmland on 13th April. Just over a week later one was seen circling very high over the Reserve. There were no sightings this year.

Oystercatcher *Haematopus ostralegus* Summer Visitor/ Breeder

The first bird arrived on the wetlands this year on 2nd February (MG/PG *et al*), just six days later than last year's early date. A second bird arrived on 10th February. On 10th March a third was seen and on 17th March four were reported (JWC), though at least one of these soon moved on. The birds invariably choose a nest site on the middle island on the Lagoon and it was the same again this year, two chicks making their first appearance on 17th April (PA). In 2017 both chicks disappeared two weeks after first being seen and last year the two young vacated the island only to be killed by grass cutting machinery on the farmland. This year's two fared rather better, both fledging successfully. Two additional adults were reported on occasions and seven flew over on 28th May (JB). From the beginning of July most reports were of just a single bird but five were on the Duck Marsh on 6th July (JK) and three flew off the Lagoon on 10th (MG/PG). A single bird on Tim's Field on 20th July looked like being the

last of the year but one was then heard on the Lagoon on 4th August during a WeBS count.

Avocet *Recurvirostra avosetta* **Rare (Summer) Visitor**

This was a new bird for the Reserve last year, two spending much of the day on the Duck Marsh on 27th June, much to the delight of many regular visitors. Unfortunately, the birds didn't stay and there was just one other brief sighting of one on the far side of the Lagoon on 2nd July. There were no sightings this year but they are not far away and will surely visit us again soon.

Grey Plover *Pluvalis squatarola* **Rare Visitor**

There have been no records in the last three years. A single bird that flew over on 30th May 2016 was the first and only record for the Reserve.

Golden Plover *Pluvialis apricaria* **Scarce Visitor**

There were just two records this year, both flyovers. On 26th May 19 flew over in a westerly direction and on 2nd June four birds flew over in the same direction (JWC).

Lapwing *Vanellus vanellus* **Winter Visitor and Casual Breeder**

The three years prior to 2016 all produced 100+ counts in January but in 2017 and 2018 there were no reports of birds in January. There was just one this year - five flying north on 20th (JWC). From the beginning of February odd birds started to be seen on the Lagoon and five were on the middle island there briefly on 2nd February (MG/PG). A report of 40 on the farmland the next day (SO) was the highest count in the first part of the year. Twelve were there on 25th February (JB). A few more birds started to arrive on the wetlands in the latter part of March and six were on the Wet Grassland on 31st (JB). Up to five could be seen on Tim's Field from that point and at least one pair attempted to nest, one with four eggs being predated at the end of April. One pair certainly nested successfully somewhere on the Reserve, two chicks being seen with seven adults on a bird walk on 5th May. There were daily sightings throughout May and June with as many as 10 birds on Tim's Field and three probably on nests but there were no subsequent reports of chicks on the field. Two juveniles on the Duck Marsh in the latter part of June were probably the two chicks seen in May. There were no sightings from 8th July until 2nd October when a flock of 60 birds was seen on the farmland (PU) - this the highest count of the year. Two were seen briefly on 19th October and 11 were on the farmland on 30th October (JWC). There were no records after this date. Maximum counts each month are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
5	40	8	13	10	10	10	-	-	60	-	-

Little (Ringed) Plover *Charadrius dubius* **Summer Visitor**

Sightings of this species have declined over recent years. In 2017 there were sightings on three dates, on one date in 2018 and on three dates this year. One flew over the Wet Grassland calling on 7th April (JWC). On 24th April a colour-ringed bird was photographed on the Wet Grassland (RAH *et al*) and on 27th April a bird was again reported on the Wet Grassland (AL).

Ringed Plover *Charadrius hiaticula* **Rare Visitor**

There have been no records in the last 12 years. There were just two sightings in 2007.

Whimbrel *Numenius phaeopus* **Scarce (Summer) Visitor**

There have been no records since 2012.

Curlew *Numenius arquata* **Passage Visitor**

Most records these days are of birds flying over and there are very few of those. On 20th February one flew high over the Reserve in a southerly direction and on 24th February on was briefly on the farmland (JWC). There were just three further flyovers reported - two birds on 17th March, one on 24th April and one on 14th July (JWC/JAH).

Black-tailed Godwit *Limosa limosa* **Rare Visitor**

Prior to this year there had only been four records of this species on the Reserve, the last on 16th March 2016. There was one this year - a single bird on the Duck Marsh on 26th June (SBe/DC/EC).

Bar-tailed Godwit *Limosa lapponica* **Rare Visitor**

This species was recorded for the first and only time on 7th May 2006 when a single bird was found on the Duck Marsh.

Knot *Calidris canutus* **Rare Visitor**

A bird on the Duck Marsh on 28th May 2006 was the first and only record for the Reserve.

Dunlin *Calidris alpina* **Scarce Visitor**

There have been no sightings in the last seven years. A single bird seen on the Duck Marsh on 1st February 2012 was the first record since May 2006.

Common Sandpiper *Actitis hypoleucos* **Passage Visitor**

The number of sightings of this species has been going down every year over recent times. Last year sightings were reported on seven dates and this year just four dates. One was on the Lagoon on 6th May (JWC) and two were there on 8th May (JH). One was reported on the Wet Grassland on 3rd July and on 6th July a bird was seen on one of the tern rafts on the Lagoon (JWC).

Green Sandpiper *Tringa ochropus* **Passage Visitor**

Prior to last year there had only been one record of this species since 2011. In 2018 there were sightings spanning the period from 25th August to the end of December, usually just of a single bird but occasionally two. This year there were sightings of a bird from 5th to 16th January on the Wet Grassland. There were no further records until 7th April when one was again seen on the Wet Grassland (AL *et al*). On 13th April one was seen on the middle island on the Lagoon (DC/EC). There were no records after this date until 10th August when one was reported on the Duck Marsh (JWC *et al*). There was just one record in September - a bird flying off the Wet Grassland on 22nd (JWC). On 12th October one was on the Duck Marsh and there were sightings most days from this point until 27th November, mainly in the same area but on occasions on the Reedbed and Wet Grassland. On 14th December a bird was again seen on the Duck Marsh (AL *et al*) and the following day it was reported on the Wet Grassland (PW *et al*). There were no further sightings after this date.

Wood Sandpiper *Tringa glareola* **Rare Visitor**

This species was recorded for the first time in 2006 when a single bird was seen on the Duck Marsh. There have been no sightings since then.

Greenshank *Tringa nebularia* **Scarce Passage Visitor**

There were no sightings this year. A bird on the Wet Grassland on 25th August last year was the first record since 28th August 2016. What was almost certainly the same bird was present until 2nd September, alternating between the Wet Grassland, Reedbed and Duck Marsh.

Common Redshank *Tringa totanus* **Scarce Passage Visitor**

Sightings of this species are few and far between these days. There had been just two records in the last three years. This year two birds were on the flooded farmland on 17th March (JWC *et al*). There were no other sightings.

Jack Snipe *Lymnocyptes minimus* **Passage/Winter Visitor**

Prior to last year there had only been 11 records in the previous six years. Last year there were sightings on nine dates, seven of these on the Wet Grassland, but this year there were just two, both again on the Wet Grassland - one on 27th April (AL) and one on 5th October (JWC).

Common Snipe *Gallinago gallinago* **Passage/Winter Visitor**

The Duck Marsh nearly always produces the most sightings but in the first five weeks of this year all records bar one came from the Lagoon, though no more than two birds were reported. From the middle of February the large majority of sightings were on the Duck Marsh and the best counts came in March with 14 on 3rd (JWC), 14 again on 6th (PA) and 11 on 10th (JB). Seven were seen in the same area on 10th April (MG/PG). A single bird on the Lagoon on 24th April was the last of the spring (DC/EC) and there were no further sightings until 7th July when one was recorded on the Wet Grassland (AL). Single birds were seen here on 28th July, 31st August and 15th September. There were regular sightings thereafter, though usually of no more than two or three birds. On 22nd September three were on the Duck Marsh and three more flew off the Wet Grassland (JWC). Birds were hard to find in November and there was just one reported sighting - a single bird on the Wet Grassland on 2nd (JWC). There were a few more sightings in December, usually of just one or two birds, but four flew off the Wet Grassland on 15th (WeBS). Maximum monthly counts are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
2	5	14	7	-	-	1	1	6	2	1	4

Woodcock *Scolopax rusticola* **Uncommon (Winter) Visitor**

There were records on five dates this year. On 7th January one was accidentally flushed under old willows by the Lagoon (JB). At the other end of the year one flew over the road by the Lagoon Hide and into the Coppice at dusk on 8th December. What was possibly a second bird was seen moments later (MB *et al*). On 11th December one flew over the river from the Scrubland early in the morning (DW). On 15th December one was again seen near the Lagoon Hide at dusk flying over the road and into the Coppice (MB *et al*) and there was a further sighting in the same area on 18th (BM).

Common Tern *Sterna hirundo* **Summer Visitor and Breeder**

For the first time in the Reserve's history there were no sightings in either April or May. A ringed bird did appear on the Lagoon on 2nd June (JWC)

and two were reported there on 16th June (RAH) but there were then just two more sightings of a single bird, the last on 27th July (JWi). There were a few more records last year but no evidence of nesting. A pair last nested successfully on one of the rafts in 2017.

Arctic Tern *Sterna paradisaea* **Rare Visitor**

This was a new bird for the Reserve in 2011. There have been no sightings since 24th May 2015.

Black-headed Gull

Chroicocephalus ridibundus **Common Visitor/Casual Breeder**

Large numbers can be found on the Lagoon and farmland in the early part of the year but a count of more than 500 on the Lagoon on 5th January (JWC) was exceptional. On 23rd March 307 were counted here (JWC). The following day 244 were on the flooded farmland (WeBS). Numbers dropped sharply after this date. A few birds remained throughout April and May but there were no nesting attempts this year. However, a juvenile was seen with three adults on one of the tern rafts on 27th June (PM/BM). A count of 124 on 28th July (DC/EC) was particularly high for the time of year but they dropped somewhat in August, though up to 50 birds were on the Lagoon some days. Numbers on the Lagoon reached 125 on 30th November (PM/BM) and birds started to gather on the farmland in the last few weeks of the year. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
500+	118	307	42	10	10	124	52	60	98	125	130

Little Gull *Hydrocoloeus minutus* **Rare Visitor**

This was a new species for the Reserve last year when an adult bird paid a brief visit to the Lagoon on 7th April. There have been no further sightings since then.

Mediterranean Gull *Larus melanocephalus* **Rare Visitor**

There have been no sightings in the last four years. An adult in full winter plumage on the Lagoon on 7th October 2015 was the first and only record for the Reserve.

Common Gull *Larus canus* **Common Visitor**

Numbers reported in the early part of the year were unusually low with no double figure counts in the first three months. However, the larger gatherings are usually on the farmland and the species may be under-recorded for that reason. April, May and June rarely produce more than

one or two records with most birds on their breeding grounds and there was only one this year - and that was a single bird flying over. Odd birds started to return in the latter part of July but a count of 235 on 31st July (PM/BM) was not only unexpected, it was also the highest ever July count. It was also the only double figure count until 3rd December when 20 were recorded on the farmland (PM/BM). Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
2	6	8	-	1	-	235	2	4	5	7	20

Lesser Black-backed Gull *Larus fuscus* **Common Visitor**

One or two can often be seen on the Lagoon or Duck Marsh but, like last year, there were no sightings in January and there was only one February record - two adults on the Lagoon on 3rd (DC/EC). From early March there were regular sightings of one or two with four on the Lagoon on 4th May (DC/EC). On 6th May five adults flew over the Lagoon (JWC). Three or four were also reported on the Duck Marsh on several dates in May. On 24th August two adults and two juveniles were on the Lagoon (DC/EC) but most records throughout the summer months were of just one or two birds. Unusually, no sightings were reported in October or November and single birds were recorded on the farmland on just two dates in December.

Herring Gull *Larus argentatus* **Common Visitor**

There were sightings in every month except February. In the winter months large groups can often be seen flying high over the Reserve towards dusk in an easterly direction, presumably to their roost site at Eccup Reservoir. On 20th January, early in the day, 15 were recorded flying over in a westerly direction (JWC). On 23rd March six immature birds were seen on the flooded farmland (JWC). One or two were regular visitors to the Lagoon but on 7th April 13 were counted there (JWC). The following day two adults and five immature birds were there (PM/BM). They will take other birds eggs and chicks and sometimes adults given the chance and on 17th April two were observed sharing an egg on the middle island on the Lagoon (MG/PG). The majority of sightings on the wetlands were in the period from March to the end of July but there were some decent counts towards dusk in the winter months with groups flying east. However, some of the biggest counts were made earlier in the day. On 24th November 61 birds were recorded flying west and on 22nd December 73 were counted flying over in the same direction (JWC).

Caspian Gull *Larus cachinnans* **Rare Visitor**

This large gull, reminiscent of a Herring Gull, was only recognised as a separate species in 2007. With increased awareness of ID criteria small numbers are being seen regularly in the UK. A near adult was picked out on the flooded farmland on 24th February (JWC) - a new bird for the Reserve.

Great Black-backed Gull *Larus marinus* **Uncommon Visitor**

Birds are occasionally recorded flying over the Reserve and there were just two such records this year. On 19th October two adults and four juveniles flew over in a westerly direction and on 24th November three were seen flying over in the same direction (JWC).

Iceland Gull *Larus glaucoides* **Rare Visitor**

Two 1st winter birds that flew over the Willow Path on 17th January 2009 were the first and only record for the Reserve.

Feral Pigeon *Columba livia domest* **Common Visitor**

Almost certainly under recorded, there were just six reported sightings this year, all involving just one or two birds. Three of the sightings were in the Bee Garden and the others on Mike Fisk Meadow and John Ackroyd Meadow (DC/EC). The river bridge has been a popular roosting and possibly nesting site in the past but there no reports from here this year.

Stock Dove *Columba oenas* **Resident (probable) Breeder**

In the past most years produced 100+ counts but last year the best was just 34 birds in December. The best ones this year again came in December with 35 on the farmland on 3rd and 30 on 9th (PM/BM). Birds were daily visitors to the feeders in the Manager's Garden throughout the year but there were only three double figure counts, the best being 15 on 18th December (DC/EC). Up to six could be seen under the feeders in the Bee Garden some days but on 26th December 12 were counted here (JB/MB *et al*).

Wood Pigeon

Columba palumbus **Resident Breeder and Winter Visitor**

This species can be very numerous some winters with birds visiting Tim's Field for seed but last year's numbers were very low with a best count of just 70 in January. Numbers in the early part of this year were very similar with a best count of 61 on Mike Fisk Meadow on 6th March (PM). They dropped somewhat after this but 50 were on Tim's Field on 29th May (JB). Large movements of birds occur some autumns. Last year 630 were recorded flying south on 28th October. There were no reports of such

movements this year but there were some good counts on Tim's Field in December. At least 200 were reported there on 3rd (PM/BM) and on 15th a similar number were seen over the far riverbank during a WeBS visit early in the day. A few pairs again bred on the Reserve this year, their flimsy nests becoming visible in the autumn as the leaves dropped.

Collared Dove *Streptopelia decaocto* **Uncommon Visitor**

This species only started to colonise the Leeds area at the end of the 1950s and here on the Reserve it never ventured much beyond the river bridge or car park prior to 2016. Since then there have been a number of sightings further onto the Reserve, particularly on the Willow Path and mainly in the period from May to September for some reason. This year, rather surprisingly, there were only two records submitted - a bird on the Willow Path on 8th May (DW) and one near the Visitor Centre on 26th December (JWC). It might appear a bit strange that a bird which is so common in the area should be classed as an Uncommon Visitor here on the Reserve.

Cuckoo *Cuculus canorus* **Scarce (Summer) Visitor**

There had only been three records of this declining species in the previous four years. There were no reported sightings this year.

Barn Owl *Tyto alba* **Resident Breeder**

A pair nested for the first time in 2015 using a box on the small building in the compound. Two young fledged but sadly one was killed on nearby power lines. From 2016 they used a box on the Scrubland raising two young that year. In 2017 birds were present but there was no evidence of young. Last year at least two young were raised in the same box. There was activity at the nest box from the very beginning of this year but it was nearly always at dawn and dusk when only volunteers were on site. On 1st January two birds were seen hunting over the Scrubland and both entered the box (JK). One or two were seen most mornings subsequently. On 7th January both were again seen entering the nest box (DW) and this was noted on a number of occasions. During May and June a bird was regularly seen at dusk leaving the box and flying off over the river and far woodland on hunting trips. On 14th July a juvenile was photographed at the nest box hole (MH/PA) and on 16th July both adults were seen flying off across the river, one returning with prey shortly afterwards. Ten minutes later a juvenile appeared on the ledge of the box (DW). On 29th July two juveniles were seen late in the evening, one initially on the ledge of the box but later both in nearby bushes, one with a rodent (PM/BM). There were several sightings subsequently of one or both adults and both juveniles. Sightings during the day were still few and far between but on

11th August a juvenile was seen in trees near the nest box during the afternoon (KMcl). Like last year, from late October a bird started to roost in the thatched gazebo, a large number of pellets being found. On 27th November one was accidentally disturbed here at 6.50am (DW) and on 29th November at 7.50am a bird was seen looking out of the nest box (DW). On 20th December two birds were watched quartering the Scrubland at 7.45am, one entering the nest box shortly afterwards (DW).

Little Owl *Athene noctua* Resident Breeder

A pair has used a nest box in the Manager's Garden with mixed success since 2015, last year raising one juvenile there. They can be elusive in the early and latter part of the year and in 2018 there were no sightings until 7th March. This year there were sightings of a single bird on the farmland on 2nd and 5th January (JWC) and on the Scrubland on 30th January (PA/KH). There were no further records until 17th March when one was seen by the nest box in the Manager's Garden (JB). There were regular sightings there from this point, a bird seen coming out of the box on 27th March (DC/EC). Two birds were seen for the first time on 24th April (PH/PM). On 22nd June two juveniles were photographed by the box (KMcl). There were no further sightings in the Manager's Garden after this and none at all until 11th August when one was spotted in the gutter of the small building in the compound (PA) - this always a good place to check. There were numerous reports of a single bird at the edge of Poplar Field in September and occasionally by the dry stone wall on the farmland but one in trees on Poplar Carr on 16th October (PA) proved to be the last of the year.

Tawny Owl *Strix aluco* Uncommon Visitor

Most records are of birds calling in woodland across the river but this year there were sightings on the Reserve on four dates. On 10th January one was reported perched in the Coppice (LS) and on 14th January one was on Bentley's Path early in the morning (DW). On 6th June a bird was seen perched on the Barn Owl box on the Scrubland late in the evening (DW). A bird was heard calling in far woodland during a Bat Night visit on 21st September (PU/MB). On 1st December one was spotted in a small copse by the river bridge at 2.30pm, several birdwatchers being able to get decent views.

Swift *Apus apus* Summer Visitor

Last year the first birds were seen on the early date of 22nd April. This year we had to wait until 5th May for the first sighting when up to seven birds were seen (JWC *et al*). There were sightings most days thereafter and numbers were somewhat higher than last year. Around 20 were over

the Lagoon on 11th May (JWC). There was an unconfirmed report of three entering boxes on the Swift Tower in the Reedbed on 2nd June but there was no subsequent activity reported. There were two particularly high counts recorded. On 7th June more than 100 were seen over the river and Lagoon (JB/MB). On 13th July more than 200 were seen high over the Reserve on a dark cloud front (JWC). The last birds of the year were seen on 1st September, a total of 18 passing over the Reserve on their way south (JWC *et al*) - 5 days earlier than last year.

Kingfisher *Alcedo atthis* Resident Breeder

Even on the river Kingfishers tend to disappear in spells of severe winter weather but this year there were sightings almost daily from the beginning of the year to the end of March, the Lagoon being by far the most productive site. There were a few sightings in the same period on the Reedbed but only one on the Duck Marsh and none on the Wet Grassland. On 30th January, with much of the Lagoon frozen over, a bird was watched catching seven small fish in succession from a perch on the top island (SF/PM). On 20th February one was observed excavating a nest hole in the Sand Martin bank (JWC). Two birds were reported excavating on 6th March and 8th March and on 13th March they were seen going into the holes (JS). Unfortunately, activity ceased abruptly soon afterwards with the arrival of the first Sand Martins. Birds were hard to find in April and May. A single bird was seen on just three dates in April and there were two sightings on 1st May but none then until 1st June. There were sightings most days from this point. Reports of three together in June may have included at least one juvenile. Three were also reported on the Lagoon on 17th August (MG/PG). High river levels throughout most of October and November encouraged birds to spend more time fishing on the wetlands. There were rather more sightings on the Reedbed in this period but on 18th October two were reported on the Duck Marsh close to where work was ongoing on a new Kingfisher nesting bank. A breakdown of sightings this year is shown below.

Lagoon	Duck Marsh	Reedbed	Wet Grassland	Dipping Ponds	Other Ponds	River
65	15	39	9	1	6	16

Green Woodpecker *Picus viridis* Uncommon Visitor

This is a very occasional visitor to the Reserve. There were just two records last year and one this year. On 23rd February one was reported in the Manager’s Garden (TP).

Great Spotted Woodpecker *Dendrocopos major* Resident Breeder

This is a common bird on the Reserve, the Willow Path being the most likely place to see one. Last year a pair used a new nest hole in a tree at the edge of the Coppice close to the Willow Path. While in residence they managed to vandalise 12 tit nest boxes in the vicinity. There was rather less damage to tit boxes this year and it is not known whether the birds used the same nest site. However, there were reports of juveniles. One was seen in the Manager's Garden on 29th June (DC/EC *et al*) and two were seen in the Rodley Robins area on 15th July (JB). Sightings were few and far between in the last two months of the year but a male did visit the feeders in the Bee Garden on 27th October and 23rd November (DC/EC *et al*) and there were two sightings on the Willow Path in December.

Kestrel *Falco tinnunculus* Resident Breeder

The east facing Barn Owl box in the compound is certainly a popular site for these birds. In 2017 they raised three young here and in 2018 four young. Birds are usually seen at the box from early in the year and the first sighting there this year was on 22nd February (DW). On 2nd March the birds were observed mating (JWC) and again on 24th March during an early morning WeBS visit. On 21st April the male was seen passing a vole to the female at the box (MHa). On 16th June the female and one juvenile were seen at the box (DC/EC). One juvenile was again reported outside the box on 30th June (PW) but on 6th July two were seen (DC/EC). Three birds calling over the Scrubland on 2nd August (PM/BM) probably included the two juveniles. After this date most reports were of just a single bird but two were over the Scrubland on 21st September (JWC). On 16th December one was watched trying to drive off one of two Sparrowhawks over Mike Fisk Meadow (DW)

Merlin *Falco columbarius* Scarce (Winter) Visitor

Both 2017 and 2018 produced just one record. There was again just one confirmed sighting this year. On 26th December one was watched attacking a small bird over Tim's Field before flying off high in a northerly direction (JWC).

Hobby *Falco subbuteo* Uncommon (Summer) Visitor

There were sightings on four dates this year. On 23rd June one flew low over Tim's Field to John Ackroyd Meadow (JWC). Just three days later on 26th June one was reported over the Duck Marsh (SB). There were no further sightings until 26th August when one was seen high over the Lagoon (JWC) and on 14th September one was reported over the farmland

(JWC). Birds have now been seen in each of the last five years, 2015 being the best so far as regards number of sightings.

Peregrine Falcon *Falco peregrinus* **Uncommon Visitor**

There were sightings in ten months of the year with peak activity in July and August. In 2017 birds were recorded on a record 42 dates but only 26 dates in 2018 and 29 this year. As always, the pylon on the farmland behind the Manager's Garden was worth checking and there were again several sightings there this year. Most involved single birds but on 24th July two were seen, one on the pylon with prey (JWC). There were sightings on six dates in July, five of these on the pylon. There were also sightings on six dates in August, four of these on the pylon. On 12th October a bird was photographed as it flew from the pylon on the far river bank across the river to the Scrubland (PW). On 13th November two were reported on the pylon on the farmland (MG/PG), this the only record that month. On 15th December two birds were reported flying over the farmland (PG).

Rose-ringed Parakeet *Psittacula krameri* **Escaped Species or Scarce Visitor from feral population**

First recorded here in 2001, there were no further sightings until 2015 when a single bird was seen on six dates. There were no sightings in the three years from 2016 to 2018 but there was one this year - a bird flying over Tim's Field and John Ackroyd Meadow on 17th November (JWC).

Magpie *Pica pica* **Resident Breeder**

This is a very common bird on the Reserve and almost certainly under-recorded. Double figure gatherings often occur but nine in one tree outside the Lagoon Hide on 16th February (MG/PG) and nine flying over John Ackroyd Meadow on 8th June (DC/EC) were the biggest number reported together this year. On 16th June 23 were counted around the Reserve during an early morning visit. There were no reports of juveniles but several pairs certainly nested again.

Jay *Garrulus glandarius* **Resident Breeder**

This is a common bird on the Reserve and while most reports are of one or two birds larger gatherings are seen at times. On 23rd March 10 were reported in a tree in the Manager's Garden (DC/EC) and on the same date 14 were seen together on the Scrubland (JWC). The next day nine were on the Wet Grassland during an early morning WeBS visit. On 19th May five flew over the road by the Lagoon (MG/PG). Two juveniles were seen in the Manager's Garden on 3rd and 24th July (DC/EC *et al*). In the same period juveniles had to be released from the feeding stations on the

Willow Path on five occasions, having squeezed through the wire netting designed to keep larger birds out! There is always a surge of activity in September and October with birds crossing the Reserve on acorn and hazelnut forays and it was the same this year.

Jackdaw *Corvus monedula* **Resident Breeder**

Large numbers typically gather at two roost sites later in the day in the winter months - in woodland across the river from the Wet Grassland and in trees behind the Lagoon. More than 300 were reported over the Reserve at first light on 5th January (JWC) and at least 150 flew in over the Lagoon towards dusk on 16th January (PM/BM). On 3rd April around 120 flew over the Scrubland from the east towards dusk to join a gathering of more than 250 birds on Tim's Field (PM/BM). At the other end of the year, on 4th December more than 200 very noisy birds gathered on the farmland (PM/JB). The same evening several hundred were seen coming in to roost in trees behind the Lagoon (PM/BM). There were further reports of around 200 birds gathering at each of the two roost sites towards dusk throughout the rest of the month. There were again several sightings of birds showing characteristics of "Nordic Jackdaw" *Corvus monedula monedula*. First noted in December 2016 and recorded on several occasions in 2017 and 2018, these birds have a pale nape and sides of the neck, a dark throat and a light grey partial collar. One or two birds showing these characteristics were reported on four dates in January, two dates in February, one date in March and three dates in October (JWC *et al*).

Rook *Corvus frugilegus* **Uncommon Visitor**

Rooks are still far from common in this part of the Aire Valley but last year was probably the best to date with sightings reported on 13 dates, though most of these were "flyovers". This year there were sightings on 10 dates, only one involving more than two birds and the majority again "flyovers". On 2nd June five were on the farmland, one of these a juvenile (JWC). On 7th September two were seen on the farmland and in trees in the nearby Manager's Garden (JWC). On 20th November one was a surprise visitor to the Bee Garden (GJB).

Carrion Crow *Corvus corone* **Resident (Probable Breeder)**

This is a very common bird on the Reserve. Gatherings of 20 to 30 birds are a regular occurrence but much larger numbers congregate at a roost site in woodland behind the Lagoon in the winter months. Juveniles are seldom reported but one was seen with an adult on Mike Fisk Meadow on the early date of 22nd April and an adult and two juveniles were on the Duck Marsh on 6th July (DC/EC). Sizeable gatherings also occur on the

farmland in the autumn and winter months. A total of 48 were counted here on 8th September (DC/EC) and 75 were recorded on 18th September (PM). Several hundred noisy Crows and Jackdaws were seen coming in to roost at the site behind the Lagoon towards dusk in December.

Hooded Crow *Corvus cornix* **Rare Visitor**

Closely related to the Carrion Crow, this is mainly a bird of North and West Scotland where it replaces that species. It is also a winter visitor from Scandinavia. One was seen briefly over the farmland on 10th November 2018. This was the first record for the Reserve. There have been no sightings this year.

Raven *Corvus corax* **Rare Visitor**

First recorded on 21st March 2015, there had only been one other record since then - a bird over the farmland on 3rd June last year. This year there were four reports of a bird flying over (JWC) - on 9th and 16th February, 11th May and 14th September.

Waxwing *Bombycilla garrulus* **Scarce (Winter) Visitor**

There was another good berry harvest this year but again no Waxwings to enjoy them. This species was last seen on the Reserve on 1st April 2017.

Coal Tit *Periparus ater* **Uncommon Visitor**

The last two years have seen a considerable increase in the number of reported sightings and there were nine this year, mainly in the autumn and winter months. A single bird was seen on three dates in January, in the Bee Garden on one occasion (JWC) and in the Manager's Garden on two dates (DC/EC). There was just one summer record - one again in the Bee Garden on 9th June (JWC). There were five records in the last three months of the year, all of single birds, three of these near the river bridge, one in the Bee Garden and one on the Willow Path.

Blue Tit *Cyanistes caeruleus* **Resident Breeder**

This is a common visitor to the feeders in the Bee Garden, Manager's Garden and along the Willow Path. Numbers of birds at the feeders were very similar to last year. Nest boxes prove popular and this year nine were used, all young fledging successfully in seven of them - see Nest Box Report for full details. A sparrow terrace box on the side of the Visitor Centre was used successfully by one pair but on 24th May a bird was seen coming out of one of the boxes in the Swift nesting tower, though it was probably only looking for something to eat. For the second year running

there were very few reports of family parties or indeed mixed feeding parties in the late summer and autumn.

Great Tit *Parus major* **Resident Breeder**

Like the Blue Tit, this is another daily visitor to the feeders in the Bee Garden, Manager's Garden and on the Willow Path throughout the year and it is a regular user of nest boxes round the Reserve. In 2017 a pair raised eight chicks in a box on the side of the Visitor Centre and last year nine fledged from the same box in the first week of June - live footage being shown on the television screen in the centre, thanks to a camera in the box. This year two birds were seen in the box on 6th March; nest building commenced shortly after and on 20th May nine young fledged. This was one of 10 boxes used by Great Tits this year but four of them were found to contain unhatched eggs or dead chicks - see Nest Box Report for full details. However, it appears to have been a good nesting season generally with plenty of birds at the feeders in the late summer and autumn and as many as seven at the feeders in the Bee Garden.

Willow Tit *Poecile montanus* **Rare Visitor (former Breeder)**

Last reported on 13th November 2013, there have been no sightings of this declining species in the last six years.

Marsh Tit *Poecile palustris* **Rare Visitor**

Birds were recorded on the Reserve in 2002 and 2004. There have been no sightings since then.

Woodlark *Lullula arborea* **Rare Visitor**

A new bird for the Reserve this year, one was recorded flying south over Tim's Field on 23rd March (JWC).

Skylark *Alauda arvensis* **Passage Visitor**

Most sightings these days are of birds flying over but odd ones do drop in briefly on occasions. The pattern of sightings was very similar to last year with sightings on five dates in the first three months of the year and five from the end of September. Most involved single birds but three were reported flying over Tim's Field in a south easterly direction on 23rd February (JWC) and in October five flew over in an easterly direction on 5th with six in a southerly direction on 12th (JWC). There were no sightings after 30th October.

Sand Martin *Riparia riparia* **Summer Visitor and Breeder**

The first two birds of the spring were seen near the nesting bank on the Lagoon on 20th March (PA), five days earlier than last year. Numbers built

up quickly and by 7th April 34 nest holes had been excavated. Two weeks later 100 nest holes were counted. A final count at the beginning of July revealed 180, well up on last year when hostile weather conditions in March and a very wet April are thought to have caused many African migrants to stop short in mainland Europe.

<u>Year</u>	<u>No. of nest holes</u>
2015	167
2016	186
2017	145
2018	88
2019	180

Good numbers of adults and juveniles gathered on overhead wires by the Visitor Centre and on the tarmac road from late June. Numbers started to fall away in the latter part of August but a mixed flock of around 100 Sand and House Martins was reported over the Lagoon on 31st August (PA/AL). Six birds over the Lagoon the next day were the last of the year (PW *et al*), 11 days earlier than last year.

Swallow *Hirundo rustica* **Summer Visitor and Breeder**

This year produced the earliest and latest ever records for this species. One high over the Lagoon on 24th March was the first of the year (BH/JK) - the previous earliest being 25th March in 2000. There were no further sightings until 3rd April and numbers remained low thereafter with no reports of more than six birds throughout April. There was some improvement in May with a best count of c20 over Tim's Field on 18th (DC/EC). The dumper truck shed again proved popular for nesting with at least one pair in residence. Twenty were on overhead wires near the toilet block on 4th August but late summer counts were generally disappointing and very similar to last year. Three birds over the Reserve on 13th October (PA) were the last of the year, four days later than the previous latest in 2001.

House Martin *Delichon urbica* **Summer Visitor**

The first birds this year were reported on 3rd April - one over the Lagoon (JAH) and two over the river (MHa) - almost three weeks earlier than last year. There were sightings on just three further dates in April, none involving more than two birds. It was a similar story for much of May until 26th when at least 16 were counted over the Reserve (JWC). Surprisingly, there were no further reported sightings until 4th August. There were some decent counts thereafter with c40 over the Dragonfly Ponds moving south on 10th August (JWC) and 26 in a rain cloud on 17th August (JWC). On 31st August around 100 birds were over the Lagoon in a mixed flock of House Martins and Sand Martins (JWC). In September there were several

reports of birds moving south/south east, the best counts being 70+ on 1st and 36 on 15th (JWC). A single bird over the Visitor Centre on 6th October (JWC) was the last of the year, just six days later than last year.

Cetti's Warbler *Cettia cetti* **Uncommon Visitor**

The status of this species at Rodley is still uncertain, though it is probably a visitor rather than a resident. First recorded on 17th December 2014, there were numerous reports in 2015, 2016 and in the first half of 2017. In 2018 it wasn't recorded until 23rd September but there were then numerous reports to the end of the year, though the explosive song, which can be heard at any time of year, was hardly ever reported. Sightings continued into January this year with a bird seen from the Reedbed Hide on 5th, 12th and 20th January (JWC). On 27th January one was reported on the Duck Marsh (SW). There were several further sightings up to 27th March but then none until 26th October when one was seen on the Duck Marsh (JWC). The following day one was reported on the Wet Grassland and one, possibly two on the Duck Marsh (JWC). There were further sightings on the Duck Marsh on 2nd November and on the Wet Grassland on 9th November. In December one was heard calling from the Willow Path on 21st and on the Lagoon on 26th (JWC).

Long-tailed Tit *Aegithalos caudatus* **Resident Breeder**

This is a common bird on the Reserve. Small parties of up to five were seen regularly in January and February. It is an early nester and large bramble patches are popular sites. By 5th March a nest had been constructed in the large bramble patch across the road from the Lagoon Hide and two birds were seen at the nest on 31st March (BM). Two adults and a juvenile were reported on the Willow Path on 27th May (DC/EC) and five birds there on 29th May also included one juvenile (MG/PG). Large feeding parties are seen frequently in the autumn months, often accompanied by other tits. At least 30 Long-tailed Tits were seen in the Coppice on 28th September (JWC). A party of nine birds were in bushes by the ramp to the Butterfly Bank on 12th October (PM/BM) and there were several reports of up to eight subsequently but a flock of at least 40 in the hedgerow by the roadside on 10th November (JWC) was by far the highest of the year. On 9th December a party of ten was seen on the River Path (DW).

Chiffchaff *Phylloscopus collybita* **Summer Visitor and Breeder**

Overwintering birds are now becoming a regular feature here. There were numerous records of one or two birds in December last year and we might have expected more sightings in January this year but there was only one - a single bird on the Butterfly Bank on 6th (JWC). In February a bird seen

in willows on the River Path on 23rd (JWC) was probably an overwintering one but the next reports of two singing on 23rd March (JWC) were certainly summer visitors. There were daily sightings from this point with as many as four singing by the end of March. As always, the Coppice was particularly productive but there were sightings all around the Reserve. There were no reports of family parties but from number of contact calls heard in August and September it appears to have been a successful nesting season. One or two were still singing throughout September and one was heard near the Manager's Garden on 5th October (MG/PG). Up to five were reported in the first two weeks of October and on 16th a mixed tit flock on the entry road included three Chiffchaffs (PC). One was on the Willow Path on 19th October but there were then just two further sightings, both in the Coppice - on 24th November and 22nd December (JWC).

Siberian Chiffchaff

Phylloscopus collybita tristis **Rare (Winter) Visitor**

These birds breed in coniferous taiga forest from the Ural regions eastwards and they winter mainly in India, though a few stray to Western Europe annually in autumn. A bird showing all the features of Siberian Chiffchaff was seen on four dates in December last year and on one occasion responded to the call being played. There were no reported sightings this year.

Willow Warbler *Phylloscopus trochilus* **Summer Visitor/ Breeder**

The first birds of the spring were recorded on 17th April - the latest ever first date for this species. One was reported singing on the Willow Path (BHe/GB) and three around the Reserve on the same date (RAH). The Coppice is usually the best place to hear this bird's distinctive song and at least three were singing here by the end of April with as many as seven round the whole Reserve. One was heard singing on the Willow Path as late as 28th August (JWC). The contact calls of *Phylloscopus* warblers could be heard all round the Reserve in August with many young birds on the wing, one observer reporting at least 20 on a walk round the Reserve on 26th (JWC). Two birds in the Manager's Garden on 25th September (DC/EC) were the last of the year, some two and a half weeks later than last year.

Blackcap *Sylvia atricapilla* **Summer Visitor and Breeder**

Overwintering birds are quite common now and there were two very late records last year - a female on the River Path on 25th November and a male in the Manager's Garden on 9th December. However, there were no sightings this year until 24th March - a male singing in roadside trees by the Lagoon and a female in the John Ackroyd Meadow hedge near the

Visitor Centre - both recorded during an early morning WeBS visit. There were regular sightings from 30th March with as many as four males reported singing round the Reserve on 6th April (JWC). The Willow Path and Coppice were, as usual, the most productive sites. There were a number of sightings throughout September with three reported in the Coppice on 21st (JWC). There were none in October but a female on John Ackroyd Meadow on 3rd November (SO) was almost certainly another overwintering bird. There were no records after this date.

Garden Warbler *Sylvia borin* **Summer Visitor and Breeder**

Roadside trees by the Lagoon continue to be the best place to see this species, particularly so in the early part of the season. The first bird was seen here this year on 28th April (JWC), just a week earlier than last year. However, it is never numerous on the Reserve. Away from this area there was one sighting on the Willow Path in May and one on the Scrubland on 28th August (MHa). A bird in the Coppice on 8th September (JWC *et al*) was the last sighting of the year.

Lesser Whitethroat *Sylvia curruca* **Summer Visitor and Breeder**

Each year seems to produce just a handful of records and this year was not much different with birds reported on eight dates. Most reports were of a single bird seen or heard in trees between the Lagoon Hide and the river bridge, the first on 27th April (RAH) and the last on 13th July (JWC). Away from this area, one was seen in the Coppice on 11th May (JWC).

Common Whitethroat *Sylvia communis* **Summer Visitor/ Breeder**

One singing in roadside brambles on 19th April (PM/BM) was the first of the year, just two days earlier than last year. On 21st April five were counted round the Reserve during an early morning WeBS visit. Large bramble patches on the roadside, Poplar Field and the Scrubland hold nesting birds every year but numbers have certainly dropped considerably from a few years ago when between 15 and 20 singing males could be counted around the Reserve. A bird was reported taking food to a nest in brambles at the Lagoon on 2nd June (JAn) and on 16th June juveniles were seen in the Coppice and at the Dragonfly Ponds. Two adults and three juveniles were reported in roadside trees on 21st June (JB). At least five birds were still singing during a WeBS visit on 7th July. More juveniles were reported in the last week of July. A count of six birds round the Reserve on 26th August (JWC) was the last record of the year, exactly a month earlier than last year.

Grasshopper Warbler

Locustella naevia **Uncommon Summer Visitor and Casual Breeder**

Seven of the previous eight years have produced sightings in April but not this year. There was only one record - a bird "reeling" in brambles at the back of the Lagoon on 5th August (JB).

Sedge Warbler

Acrocephalus schoenobaenus **Summer Visitor and Breeder**

Three birds in the Reedbed on 20th April (RAH) were the first of the year, just a day earlier than last year, but there was then only one further reported sighting in the next three weeks. The number of records was certainly disappointing, as was the number of birds reported and like last year it was almost certainly less numerous than its cousin the Reed Warbler. However, birds were still seen on all four main wetland areas and, as in previous years, at least one pair nested at the Dragonfly Ponds, five juveniles being seen here on 4th August (WeBS). Single birds seen on the Wet Grassland (JWC) and Duck Marsh (DC/EC) on the early date of 21st August were the last of the year, five days earlier than last year.

Reed Warbler

Acrocephalus scirpaceus **Summer Visitor and Breeder**

A WeBS count on 21st April produced the first records this year with birds seen on the Wet Grassland, Reedbed and Duck Marsh. There were regular sightings from this date, the large majority on the Wet Grassland, the eastern end being particularly productive. A WeBS count one month later on 19th May provided the best count of the year - a total of 10 birds with sightings on all four main wetland areas. Six singing birds were recorded on 1st June (JWC). At least three seen at the Dragonfly Ponds on 28th August included juveniles (JWC) - this the only report of young this year, though there is no reason to believe more pairs did not nest successfully. Two birds on 8th September (JWC) were the last of the year, exactly the same date as last year.

Firecrest *Regulus ignicapillus* **Rare Visitor**

A bird picked out among the Goldcrests in the Coppice on 17th December 2017 was the first ever for the Reserve. There were further sightings on several dates to the end of the year. What was probably the same bird was seen in 2018 in the same area on 1st January and on seven further dates up to 28th February. A bird was again recorded in December this year. It was first seen in the car park by the bridge on 14th (AL/JWC *et al*) and there were sightings most days subsequently in roadside trees in the same area up to the end of the year.

Goldcrest *Regulus regulus* **Winter Visitor**

2017 and 2018 were very good years for this tiny bird at Rodley. Breeding mainly in coniferous woodland, there are few spring and summer sightings and most records are from September or October and throughout the winter months. Last year up to five were seen in the Coppice in January. There were again numerous reports in January this year but all just of single birds and mainly on John Ackroyd Meadow. A bird there on 3rd March (JWC) was the last of the winter/spring. There was just one summer sighting - a bird on the entry road on 7th August (JWC). The first bird of the autumn was seen near the Visitor Centre on 1st September (JWC) and there were frequent sightings from this point with often two and occasionally three birds seen. On 24th November up to eight were seen round the Reserve (JWC) and on 3rd December five - four of these in a large alder on the riverbank by the bridge (LJ). There were a number of sightings throughout December of one or two birds, the area around the river bridge being particularly productive.

Wren *Troglodytes troglodytes* **Resident Breeder**

This is a common bird on the Reserve and it is recorded in every habitat. On 17th February 15 were counted round the Reserve during an early morning WeBS visit. The Manager's Garden Hide has been a popular nesting site in the past and last year a pair nested in the new extension there, three chicks fledging successfully. This year a pair again nested in the extension and the hide had to be closed for several days in April. Several chicks subsequently fledged. There were no other reports of young. On 21st April 14 singing birds were counted round the Reserve during another early morning visit and 16 were heard on 19th May at 11 different locations.

Nuthatch *Sitta europaea* **Scarce Visitor**

This is a very occasional visitor here. There was just one record last year, this the first since 2012. There were three this year, albeit two of these only heard. On 20th January one was calling from the riverbank behind the Duck Marsh (JWC). On 24th March a bird was seen in trees near the river bridge (JWC) and on 14th August one was heard calling from the River Path (JWC).

Treecreeper *Certhia familiaris* **Casual breeder**

Prior to last year this species was rarely seen far from the area around the river bridge. However, last year there were a number of sightings on the Willow Path, particularly in the second half of the year. It was the same again this year, though there were not as many records. One was seen on the Willow Path as early as 2nd January (JWC) and on 6th January one

was reported in the Manager's Garden (DC/EC). There were several sightings in the area around the river bridge from 9th February and on 23rd June there was a further sighting on the Willow Path. From 1st September there were a number of sightings here with two birds on 10th November (JWC). There was also a sighting on the Wet Grassland on 2nd November (JWC). On 24th November one was reported on the River Path (JWC). In December a bird was seen on two dates in trees near the river bridge (KMcl/JWC).

Starling *Sturnus vulgaris* **Casual Breeder and Winter Visitor**

Numbers have declined significantly in recent years and the large farmland flocks have gone. This year even the number of sightings was disappointing with half of them coming in just two months - March and April. The biggest count in January was just 12. In March 40 were reported on the farmland on 6th (JB/PM) and 48 on 16th (JWC), these the biggest counts in the first half of the year. There were no records in July or August, just two in September and one in October, the last one the biggest count of the year - at least 100 birds flying over the Visitor Centre on 30th October (PM/BM). There were just two reported sightings in November, but of no more than 12 birds and none in December.

Ring Ouzel *Turdus torquatus* **Rare (Passage) Visitor**

Our only summer visiting thrush breeds in the uplands and numbers are declining. It was a new bird for the Reserve in 2017 when there were two records - on 6th May and 4th November - the last one photographed on Mike Fisk Meadow. There have been no sightings since then.

Blackbird *Turdus merula* **Resident Breeder and Winter Visitor**

An influx of Continental birds is evident some winters but there were no reports of more than nine in the first three months of this year. The hedgerows and Coppice provide plenty of natural nesting sites but on 3rd May one was observed nest building in the roof of the Rodley Robins' gazebo (DS) - unfortunately without success, broken eggs being found on the table under the nest. A count of 20 made during an early morning visit on 16th June proved to be the joint highest of the year. Reports of juveniles are always few and far between but there is no reason to think this species did not have a successful breeding season. A report of 20 birds round the Reserve on 9th November (JWC) was by far the highest of the autumn and could have included some Continental visitors. In December 19 were counted during an early morning visit on 15th.

Fieldfare *Turdus pilaris* **Winter Visitor**

Small numbers of birds could be seen on the farmland or in the Poplars most days in the early part of the year but numbers were low and often in single figures. The biggest flock was just 30 birds on the farmland on 17th February (JWC). Two birds flying west over the Coppice on 30th March (JWC) were the last of the spring. The first of the autumn - a group of at least 30 - were reported flying over in a southerly direction on 19th October (JWC). The next day a total of 460 birds were logged flying west and on 30th October 180 passed over (JWC). Odd birds were seen on the farmland in November and around 50 flew over in a north westerly direction on 24th (JWC). One or two birds were reported some days in December but on 18th a total of 26 were recorded in a small tree at the edge of Mike Fisk Meadow (DC/EC).

Redwing *Turdus iliacus* **Winter Visitor**

Small numbers of birds were seen most days in January and February but, as with the Fieldfares, numbers were low and often in single figures. A flock of around 50 mixed thrushes in trees round the Lagoon on 2nd March included a few Fieldfares but were mainly Redwings (JWC) and this was the highest count in the early part of the year. Two birds on the farmland on 6th March (DC/EC) were the last of the spring. The first flocks of the autumn passed overhead on 5th October - a total of 780 birds - and at least 30 landed briefly on John Ackroyd Meadow (JWC). The next day a further 230 passed over the Reserve. On 9th October 30 were in the John Ackroyd Meadow hedgerow by the containers. There was a very large movement over the Reserve on 20th October - a total of 1,700 birds logged moving in a westerly direction (JWC). Small numbers flew over in the next few weeks and a few did drop in on occasions but seldom more than three or four. There were a few more birds in the second half of December. On 22nd around 50 were over the farmland (JWC) and 22 dropped into trees in the Manager's Garden on the same date (DC/EC). On 29th 16 were counted on Poplar Field (SW).

Song Thrush *Turdus philomelos* **Resident Breeder**

A bird was singing in the John Ackroyd Meadow hedgerow near the Visitor Centre as early as 6th January (PM/BM). There were daily sightings throughout the rest of the month with the Butterfly Bank and Bee Garden the most productive sites, though three were seen on Mike Fisk Meadow on 19th (PM/BM). In February it was the Willow Path and Coppice that produced nearly all the records, four being seen in the Coppice during an early morning WeBS visit on 17th but by April birds could be heard all round the Reserve. Two or three could still be heard singing late in the evening in the first week of August but, as in most years, sightings then

tailed off and there were none from 8th August until 10th October when six were reported flying south over the Reserve (JWC). This was the only sighting that month and there were none in November. Typically, birds started to be seen again in December and there were numerous sightings from 11th, on three occasions in the Bee Garden. On 29th one was singing in the Coppice at 4.00pm (PM/JB). There were no reports of young this year but several pairs almost certainly nested on the Reserve.

Mistle Thrush *Turdus viscivorus* **Uncommon Visitor**

The pattern of sightings was very similar to recent years with at least half coming in the first three months and most of them on the farmland. Most sightings involved no more than four birds with six on one date (JWC). There were sightings on just three dates in the months April, May and June but several in July including a family party of five birds on the farmland manure heap on 21st (JB). Up to four birds were seen on several dates to the end of the year, usually on the farmland, but on 26th December four were on John Ackroyd Meadow (JWC).

Spotted Flycatcher *Muscicapa striata* **Uncommon Passage Visitor**

The last two years have each produced sightings on six dates. This year was disappointing with just one record - a single bird on the Willow Path on 21st August (AL).

Robin *Erithacus rubecula* **Resident Breeder and Winter Visitor**

This is a common bird on the Reserve and almost certainly under-recorded. The majority of records come from the Willow Path, Manager's Garden and Bee Garden. The first juvenile was reported in the Manager's Garden on 9th June (DC//EC) and there were further reports of single juveniles here in the first two weeks of July. An adult and juvenile were also reported on the Willow Path on 29th June (DC/EC). Resident birds can be joined by immigrants from Scandinavia and continental Europe but there was no noticeable increase in the number of birds in the autumn and winter periods this year.

Black Redstart *Phoenicurus ochruros* **Rare Visitor**

There were again no sightings this year. A female in the hedgerow opposite the workshop on 9th February 2008 was only the second record for the Reserve.

Common Redstart

Phoenicurus phoenicurus **Uncommon Passage Visitor**

There have now been records in each of the last five years, though only one again this year. Last year a bird was recorded on 25th August and this year one was reported along the River Path on 26th August (JWC).

Whinchat *Saxicola rubetra* **Uncommon Passage Visitor**

It was a very poor year with no spring records and just one autumn one - a birds on Tim's Field on 7th September (JWC). Last year only produced three records - one in each of May, August and September.

Stonechat *Saxicola torquata* **Uncommon Passage Visitor**

Tim's Field is a good place to look out for these birds as they pass through in September and October. This year was disappointing with a single bird there on just three dates - 5th October (JWC *et al*), 6th October (JWC) and 19th October (DC/EC *et al*).

Wheatear *Oenanthe oenanthe* **Uncommon Passage Visitor**

There were several reports of a bird on Tim's Field on 20th April (DC/EC *et al*) but this was the only spring record. There was also just one autumn record - a bird flying onto Mike Fisk Meadow on 15th September (JWC).

Dipper *Cinclus cinclus* **Uncommon Visitor**

The fast flowing water downstream of the weir always looks ideal for Dippers but after a spate of sightings in 2013 they have been few and far between in recent years. There was just one one record last year and one again this year - a bird flying up river under the river bridge on 26th December (JWC).

House Sparrow *Passer domesticus* **Uncommon Visitor**

A few birds can still be found in bushes by the main gates by the canal bank but there was only one reported sighting last year and one again this year - two males there on 22nd December (JWC). Leeds Birdwatchers' Club had a ringing station here as far back as the 1950s and in 1959 a total of 289 House Sparrows were ringed here. How times have changed.

Tree Sparrow *Passer montanus* **Casual Breeder**

There were sightings on 13 dates last year, the last on 11th November. This year there were no sightings in the first nine months of the year. This is fairly typical of this species, birds appearing for a time and then disappearing for months on end. On 5th October two were seen on the feeders in the Bee Garden (DC/EC) and there were daily sightings from this point to the end of the year, all bar three in the Bee Garden. Numbers

varied from day to day with the best counts nine on 28th October (JB) and 11 on 17th November (JWC) but often just two or three. On 8th November five were seen in the Manager's Garden (DW), this the only record there.

Dunnock *Prunella modularis* **Resident Breeder**

The hedgerows round the two meadows provide ideal nesting habitat for this very common resident but the Bee Garden and Manager's Garden are probably the easiest places to see them. As many as five were reported under the feeders in the Bee Garden. There was only one report of juveniles - an adult with two in the Bee Garden on 7th July but the species is almost certainly breeding very successfully here.

Yellow Wagtail *Motacilla flava* **Scarce (Summer) Visitor**

There were no sightings between 2005 and 2015. There have been a few records since 2016 but just one "flyover" last year. There were four records this year. On 20th April a male and female were on Tim's Field (RAH). On 24th April one was on the middle island on the Lagoon (ABI) and one was again seen here on 5th May (AL). On 1st September one was reported flying south over the farmland (JWC).

Grey Wagtail *Motacilla cinerea* **Common Visitor/Casual Breeder**

There were sightings in all months except June. Three were reported in the compound on 19th January and on 16th February four were on the wall of the canal by the main gates (JWC), close to where this species has nested in the past. In April and May there were several sightings of a bird on the tern rafts and on the middle island on the Lagoon. On 7th July two were seen on the Lagoon and two on the Fish Pass during an early morning WeBS visit. On 22nd September two were reported at the Dipping Ponds (JB). In December a bird was seen on two dates on the Wet Grassland (JWC/JB). There were no reports of young this year.

Pied Wagtail *Motacilla alba* **Common Visitor/Casual Breeder**

The manure heap on the farmland close to the dry stone wall used to produce regular sightings but it was moved last year and the number of records of this species has certainly dropped as a result. The compound still produces a few sightings and birds have nested here in the past. One or two were seen here on a number of occasions from January. There were also a few records at the edge of the farmland. On 16th June an adult and two juveniles were seen on Tim's Field but this was the only report of young this year. There were in fact very few records away from the farmland and compound but three birds were seen on the Duck Marsh on 26th October (MG/PG). Overall, the number of records was disappointing.

White Wagtail *Motacilla alba alba* **Scarce Passage Migrant**

The Continental White Wagtail can and does turn up on occasions so black and white wagtails seen in March and April are worth checking carefully. There were two sightings in April last year but none confirmed this year. However, a report of three *alba* Wagtails flying west over the flooded farmland on 17th March (JWC) was interesting and may or may not have been this species.

Meadow Pipit *Anthus pratensis* **Passage Migrant**

Almost all reports were of birds flying over the Reserve. There was just a handful of records in the first part of the year and there was to be no repeat of the exceptional count of 339 on 2nd April last year - no more than three birds being reported flying over. A single bird was recorded on 10th July but there was evidence of autumn passage from the beginning of September as birds started to leave their moorland breeding areas and move south. Most reports involved less than 10 but a total of 27 were recorded on 28th September (JWC). Five dropped in on the farmland the next day (JWC) - one of the few non flyovers.

Tree Pipit *Anthus trivialis* **Rare Passage Visitor**

A bird that flew over the Visitor Centre calling on 25th August (JWC) was only the fourth record for the Reserve.

Chaffinch *Fringilla coelebs* **Resident and Winter Visitor**

Numbers on the Reserve are low for much of the year but during the winter months the Chaffinch population is swelled by the arrival of birds from elsewhere in Europe. This was illustrated on 5th January when 34 birds were counted flying from Tim's Field to the Coppice (JWC). Twenty were reported in the Coppice the next day. On 16th March c20 were on Tim's Field feeding on the seed crop there (JWC) and on 24th March twelve were counted during a WeBS visit. Up to four could be seen daily on the feeders in the Manager's Garden and some days in the Bee Garden in the first three months of the year. Numbers started to tail off from the end of March and there were no sightings at all after 21st April until 8th June when a female and three juveniles were reported at the feeders in the Manager's Garden (DC/EC). Activity was spasmodic throughout June, July and August and birds only became daily visitors again at the feeders in the Manager's Garden in September. For some reason Chaffinches are much less frequent visitors to the feeders in the Bee Garden and there were only two reported sightings there after 3rd March until late November when one or two did start to turn up there again. Twelve birds flying south on 5th October may well have been winter visitors and on 9th November c15 were on Tim's Field and the farmland (JWC). On 24th November 10 were in

trees by the Education Pond (PL/ML) and on 26th December at least 20 were seen in the same area (JWC).

Brambling *Fringilla montifringilla* **Scarce (Winter) Visitor**

This is a very infrequent winter visitor to the Reserve. There were no sightings in 2015, 2016 or 2017 and just three last year - a single bird in each case. There were two this year. On 2nd February one was reported in the Manager's Garden (CH) and on 6th October one was seen in the container area by Tim's Field (JWC).

Bullfinch *Pyrrhula pyrrhula* **Resident Breeder**

This is one of the most frequently recorded birds on the Reserve thanks to its daily presence for much of the year on the feeders in both the Manager's Garden and Bee Garden. Counts in the Manager's Garden in the early part of the year were a bit higher than last year, eight on 6th February including five males (PA) and five on 16th February including three males (JAn). Up to three males were also recorded in the Bee Garden. On 11th May six birds at the feeders in the Manager's Garden were all males (DC/EC). The first juvenile wasn't seen until 6th July (DC/EC), just one day earlier than last year. Four juveniles were at the feeders in the Manager's Garden on 24th August (MG/PG) and four again on 1st September (DC/EC). The birds usually become less visible for a time during their post breeding moult but last year there were no sightings at all from 20th August to 6th October which was unusual. It was very different this year with sightings daily throughout. Up to six were seen at the feeders in the Bee Garden and five in the Manager's Garden in December.

Greenfinch *Chloris chloris* **Resident Breeder**

The population continues to fluctuate due to outbreaks of the disease trichomonosis. Numbers at the feeders in the Bee Garden and Manager's Garden were again very low in the first part of the year with usually no more than two or three birds at each site. A count of six at the feeders in the Manager's Garden on 3rd April (DC/EC) was the best in the first six months of the year. A report of seven there on 25th August included some juveniles (DC/EC) and was the joint best count of the year at the feeders. In September up to five were reported at the feeders in both gardens but there were few sightings elsewhere on the Reserve. In December up to seven birds were seen on the feeders in the Manager's Garden but no more than three in the Bee Garden in the same period.

Twite *Carduelis flavirostris* **Rare (Winter) Visitor**

Breeding on treeless moors and bare coastal heaths, many move to the coast for the winter. In 2017 there were two sightings of a single bird on 11th and 12th November, in each case associating with Linnets. Prior to this there had been just two records - in 2000 and 2003. There were no sightings in 2018 or this year.

Linnet *Carduelis cannabina* **Casual Breeder and Winter Visitor**

These are birds of seed-rich habitats and are usually only present in any numbers in autumn and winter when there is a ripe seed crop on Tim's Field. Even then numbers fluctuate from day to day but most years produce three figure counts. However, last year was disappointing with a best total of just c90 on the late date of 28th April. A poor crop of Fodder Radish seed in the autumn limited numbers to no more than 40 birds. Numbers in the early part of this year did reach 59 on 6th January (JWC) - this, surprisingly, proving to be the highest count of the year - but most reports were of less than 30 birds. One or two pairs have stayed to nest on occasions and there were two sightings in June, both at the edge of Tim's Field - three birds on 2nd and six on 23rd. - but there was no evidence of successful nesting. A few birds started to be seen on Tim's Field again in September but usually no more than 30. A count of c50 on 17th November (JWC) was by far the highest count of the autumn. Small flocks were seen most days in December but the best just 35 birds on 3rd (PM/BM).

Lesser Redpoll *Carduelis cabaret* **Passage and Winter Visitor**

There were plenty of sightings in the early part of the year, but most of these involving no more than three birds. Three on John Ackroyd Meadow on 2nd January were the first and three were reported feeding on alders near the bridge four days later (JWC). Five were on the Willow Path on 27th February (MG/PG) and nine in a silver birch on the Butterfly Bank on 2nd March (JWC). A party of 12 feeding in trees near the main gates on 23rd March (JWC) was the best count of the year. There were several reports of up to five birds on 7th April, these the last of the spring. The first bird of the autumn was recorded flying over calling on 5th October (JWC) but, surprisingly, there was only one other report of a single bird in October. Very wet weather conditions probably didn't help. There were no records in November but a single bird was reported on three dates in December, in each case in roadside trees by the Lagoon.

Crossbill *Loxia curvirostra* **Rare Visitor**

This was a new bird for the Reserve last year, though only as a “flyover”. Eight were recorded on 29th September and nine on 17th October, on both occasions calling. There were no sightings this year.

Goldfinch *Carduelis carduelis* **Resident Breeder**

This is a daily visitor to the feeders in the Bee Garden throughout the year but they are seen much less often in the Manager’s Garden. Like last year there were a few records from the Manager’s Garden in the early part of the year but more often than not the birds were in the trees there, rarely coming onto the feeders for some reason. Numbers visiting the Bee Garden increased considerably in July with plenty of young birds on the wing. A flock of around 70 on Mike Fisk Meadow on 19th July feeding on seed there (PM/BM) and c120 in the same area on 14th August (JWC) included many juveniles, suggesting another good breeding season. Up to eight juveniles were counted at the feeders in the Bee Garden in September. Numbers at the feeders dropped somewhat from the middle of October, birds tending to be seen more feeding on alder seed in roadside trees by the Lagoon.

Siskin *Carduelis spinus* **Passage and Winter Visitor**

Breeding mainly in conifer plantations, here at Rodley it is largely a passage/winter visitor. Birds that breed further north in Britain make their way south and are joined by continental immigrants. Roadside alders by the Lagoon are always worth checking in the winter months when birds can be picked out feeding on the seeds. Six were seen there on 6th January (JWC) and single birds on three dates in February. On 23rd February four were seen at the Dragonfly Ponds (JWC). This was the last sighting in the early part of the year. Autumn records were all of birds flying over, the first on 28th September - a single bird (JWC). There were further sightings on five dates in October but none involving more than five birds. There were no records in November but in December four were reported in a Silver Birch by the Manager’s Garden on 15th (DC/EC) and on 28th one flew over the Wet Grassland (JWC).

Yellowhammer *Emberiza citronella* **Rare Visitor**

This remains a very scarce bird in the area. There was just one record last year and none this year.

Reed Bunting *Emberiza schoeniclus* **Resident Breeder**

Although this is very much a bird of the wetlands it is, nevertheless, a daily visitor to the feeders in the Manager’s Garden and Bee Garden for much of the year with the highest numbers between January and April. Up to

nine were reported in the Manager's Garden and up to three in the Bee Garden in this period this year. On 3rd March a male was killed by a Sparrowhawk under the feeders in the Bee Garden (PM/BM *et al*). Birds almost certainly nested on all four main wetland areas and the first juvenile was reported on the Wet Grassland on 15th June (JAn). There were one or two sightings in the reedy areas at the Dragonfly Ponds but no suggestion that birds nested here, as was the case in previous years. For such a common bird it can be very difficult to find in late summer and early autumn as birds go through their post breeding moult. There were only three sightings of single birds in the three months from the middle of July to the middle of October this year. There were a few sightings at the feeders in the Manager's Garden and Bee Garden from the middle of October but of no more than two birds. There was, however, a very good count of 30+ on 9th November on Tim's Field and the nearby Wet Grassland (JWC). Birds were daily visitors to the feeders in both gardens from the middle of November but no more than four birds were reported at each site.

ESCAPED SPECIES

Black Swan *Cygnus atratus* Escaped Species

First recorded in September 2013, a bird spent several spells on the wetlands. In 2016 two were present on the wetlands and farmland from 17th January until 5th June. Subsequently there were several sightings on the river, the last on 23rd July 2016. There were no records in 2017 or 2018 but this year one turned up on the Lagoon on 26th December (JWC *et al*). It was present to the end of the year, spending time on the Wet Grassland, farmland and canal where it was even reported on by the BBC's Look North programme.

Bar-headed Goose *Anser indicus* Escaped Species

Previously recorded in 2009, 2010 and 2011, one was seen on the Lagoon on 8th April last year. There were no sightings this year.

Chestnut Teal *Anas castanea* Escaped Species

There were no records in 2018 or 2019. Recorded for the first time in 2016, a male was seen on the Lagoon during an early morning WeBS count on 18th December that year. There was again one sighting in 2017 - a male on the Lagoon on 19th March.

Cockatiel *Nymphicus hollandicus* **Escaped Species**

One flew over the farmland to the river on 2nd March (JWC). This was the first record of this species.

Zebra Finch *Taeniopygia guttata* **Escaped Species**

One flew over the Visitor Centre on 5th August last year, landing briefly on the radio mast (JWC).

Other species that have been recorded on the Reserve in previous years:

Corn Bunting
Grey Phalarope
Marbled Duck (Probable escape)
Red-crested Pochard (Probable escape)
Ringed Teal (Escape)
Sandwich Tern
Short-eared Owl

FIRST AND LAST DATES FOR WINTER VISITORS
2019

SPECIES	LAST	FIRST
Whooper Swan	31 st March	5 th October
Wigeon	12 th May	18 th September
Goldeneye	10 th April	10 th November
Waxwing	-	-
Fieldfare	30 th March	19 th October
Redwing	6 th March	5 th October
Brambling	2 nd February	6 th October

FIRST AND LAST DATES FOR SUMMER VISITORS
2019

SPECIES	FIRST	LAST
Garganey	-	-
Hobby	23 rd June	14 th September
Osprey	25 th August	25 th August
Marsh Harrier	-	-
Avocet	-	-
Little (Ringed) Plover	7 th April	27 th April
Whimbrel	-	-
Black-tailed Godwit	26 th June	26 th June
Greenshank	-	-
Common Sandpiper	6 th May	6 th July
Common Tern	2 nd June	27 th July
Arctic Tern	-	-
Cuckoo	-	-
Swift	5 th May	1 st September
Sand Martin	20 th March	1 st September
Swallow	24 th March	13 th October
House Martin	3 rd April	6 th October
Yellow Wagtail	20 th April	1 st September
Common Redstart	26 th August	26 th August
Whinchat	7 th September	7 th September
Wheatear	20 th April	15 th September
Ring Ouzel	-	-
Grasshopper Warbler	5 th August	5 th August
Sedge Warbler	20 th April	21 st August
Reed Warbler	21 st April	8 th September
Garden Warbler	28 th April	8 th September
Common Whitethroat	19 th April	26 th August
Lesser Whitethroat	27 th April	13 th July
Willow Warbler	17 th April	25 th September
Spotted Flycatcher	21 st August	21 st August

In view of the number of Blackcaps and Chiffchaffs now over-wintering in the area it is not possible to give accurate arrival and departure dates for actual migrants.

Nest Box Report

There were again three Barn Owl boxes in operation this year - two in the Yorkshire Water compound and one on the Scrubland. The east facing box in the compound was again used by Kestrels, two young fledging successfully. The Scrubland box was used by Barn Owls in 2016, two young fledging successfully, but it wasn't in 2017 although there was activity at the box in April and May of that year. In 2018 birds were again in residence and it is thought that at least two young fledged though no more than one was seen at any one time. This year we can be certain that two young fledged successfully.

Little Owls had their usual choice of three boxes - in the Manager's Garden, in the Coppice and on the riverbank behind the Wet Grassland. The Manager's Garden box was used in 2015 and 2016 but nesting attempts in 2017 were thwarted by Grey Squirrels that took up residence. The box was again used in 2018 and at least one young fledged successfully. This year two young fledged successfully, despite a considerable amount of Grey Squirrel activity in the area. The box on the riverbank was found to contain a bit of nesting material and the one in the Coppice was full of moss but who took it there is a mystery.

Accessing some of the smaller boxes, particularly along the riverbank, is practically impossible these days due to the height of the vegetation and various trip hazards such as wild bramble runners. However, it was still possible to check around 60 boxes and 19 of these were found to have been used - three more than last year.

Blue Tits used one more box than last year - nine - and all young fledged successfully in seven of these. One contained several broken eggshells and the other two eggs. This particular box was used by Wrens last year.

Great Tits used ten boxes but four of these had unhatched eggs or dead chicks. One contained five eggs and one several broken eggs. The other two contained one egg and one partially feathered chick. The box with five eggs showed Great Spotted Woodpecker damage as did several other boxes. The problem was particularly bad last year when a pair nested in the Coppice close to the Willow Path. Nearly every nest box in the vicinity had been broken into. Twelve boxes were badly damaged and had to be replaced.

One pair of Great Tits again successfully used the box on the side of the Visitor Centre. In 2017 they raised eight young here, last year nine and

nine again this year. Live action from this nest was relayed to the television in the Visitor Centre. Woodmice were found to be in residence in four boxes, which is not unusual as they are excellent climbers.

Species	Boxes Used	All Fledged	Unhatched Eggs/Dead Chicks
Blue Tit	9	7	2
Great Tit	10	6	4
Robin	-	-	-
Wren	-	-	-

Neither of the two Goosander boxes in riverside trees were successful. One box was found to be empty and the other was full of leaves, suggesting Grey Squirrel activity. Neither box was checked in 2018.

Species	Boxes Used	No. of Young Fledged
Kestrel	1	2
Little Owl	1	2
Barn Owl	1	2
Goosander	-	-

MAMMALS

Fox *Vulpes vulpes*

There was a lot of activity from the beginning of the year with 16 reported sightings in January alone. Several sightings were of two animals and on 16th January two were observed mating on the Wet Grassland (JH). On 14th January a vixen was seen on the road by the bridge carrying what appeared to be a large rodent (JB) and on 27th March a vixen was reported on the farmland with a female Pheasant (ABI). However, on 8th April a male came through the Bee Garden, completely ignoring six female Pheasants under the feeders (PM/BM). At least two and possibly three pairs bred on the Reserve this year. On 10th April two small cubs were seen outside a den at the Dragonfly Ponds (SB) and the following day a vixen and three cubs were seen there (PM/BM).



Subsequent camera trap images revealed four cubs. Between 19th and 21st April a vixen was captured on a camera trap with two small cubs at a den in the Coppice and on 29th April a small cub was photographed by the dry stone wall (KMCL). On 22nd May a vixen and one cub were seen on Mike Fisk Meadow and two days later a vixen and two juveniles were watched playing on Tim's Field during the evening (PM/BM). On 29th May a vixen and juvenile were watched from the Visitor Centre as they came to the top of the ramp to the Butterfly Bank (JB *et al*). Activity slowed considerably from the end of June and there were sightings on just nine dates in the next five months.

Otter *Lutra lutra*

The last two years have been a bit disappointing with only limited evidence of their presence, though there were three reported sightings last year. The nature of the river bank has changed considerably over recent years and there are rather fewer suitable places to look for spraint or tracks these days. However, there were a number of reliable daytime sightings this year. On 10th April one was seen from the River Path swimming downstream early in the morning (DW). Five months passed before the next sighting on 11th September when one was seen from the river bridge at 10.00am (FW) and three days later one was reported from the bridge swimming upstream (JC). On 24th September there was a further sighting from the bridge (JB/MB). There



were four reported sightings in October though one turned out to be an American Mink. On 12th October one was seen “porpoising” down the Duck Marsh (JH); on 28th October there was a further, albeit brief sighting of one on the Duck Marsh (JB) and on 30th one was seen at the end of the River Path (ABI). Certainly the best sighting of the year came on 2nd November when a large male Otter was photographed out of the water at the edge of the Duck Marsh (PH/AL). There was a further sighting on the Duck Marsh just four days later (AH). On 12th November spraint and footprints were found at the downstream end of the Fish Pass during an Environment Agency visit. The good number of sightings in October and November may well have been due to very high river levels in both months forcing animals to look elsewhere for food.

American Mink *Neovison vison*

There were 16 records this year, five less than last year, the first on 17th February - an animal seen in the roots of a large Alder on the river bank from the bridge (JHay *et al*). On 11th March a small female Mink was found dead near the Reedbed Hide. There were also sightings on the Wet Grassland, Duck Marsh and Lagoon over the following months. On 24th July one was seen with a juvenile Black-headed Gull at the back of the Duck Marsh (NT) and on 31st July one was reported on the Sand Martin nesting bank (NT). On 30th October two black Mink were seen running down the River Path (JS) and on 8th November one was on the river bank in the same area (JB). There were no sightings after this date. There were no reports of juveniles this year.



Weasel *Mustela nivalis*

The road past the Visitor Centre has always been a good place to spot Weasels and the first one seen here this year was on 1st January (MB). The section of road between the Visitor Centre and the Dipping Ponds



continued to produce sightings throughout the year but animals were also seen on the River Path, by the Lagoon and Willow Path Hides, in the Manager’s Garden, Bee Garden and at the Dragonfly Ponds. There were sightings in all months except May but March was certainly the most productive month with sightings reported on nine dates. On 15th April two juveniles were seen by the Coppice gate and a juvenile was also reported on 8th September (JB). A healthy population of small rodents is obviously important to the Weasel’s well-being and on 14th September one was seen with a vole at the Dragonfly Ponds (AT). On 9th November one was

reported carrying a Toad in the Reedbed (KH). On 1st December one was seen in the Bee Garden (DC/EC).

Stoat *Mustela erminea*

This species is recorded from time to time but it is much less common here than its smaller relative, the Weasel. There were reliable sightings on just five dates in both 2016 and 2017, none in 2018 and none again this year.

Roe Deer *Capreolus capreolus*

It was an excellent year for this species with a total of 100 reported sightings and up to nine animals seen. On 1st January two were on the Scrubland (JK) and two or three were regularly seen here over the following weeks. On 12th January two turned up in the Manager's Garden (GJB). The area at the back of the Duck Marsh has been productive every year and on 22nd February six were seen here with another three on Tim's Field (JB). On 13th March a male and three females were reported on the farmland (DC/EC). There were some good counts on the Scrubland in March - eight on 15th, seven on 18th and seven again on 20th (DW). On 13th April six were on Tim's Field (PA). The first juvenile of the year was photographed on the Duck Marsh on 16th June (KMcL) and on 7th July a female and two juveniles were on the Willow Path early in the day. On 4th August a male, three females and two juveniles were seen in the Reedbed (KMcL). Later in August there were reports of a female and a single juvenile on the Willow Path, again early in the day. On 15th September a female and two juveniles were encountered on the entry road during an early morning WeBS visit. For a large animal they are very adept at squeezing through small gaps but how one managed to squeeze through the wires on the Coppice gate to get into the Coppice on 20th November (JB) was quite remarkable.



Mole *Talpa europaea*

Sightings tend to be mainly of dead individuals and one was found in the Coppice in late summer on top of a pile of wood chippings. There was certainly plenty of evidence of their presence, the most obvious being on the grass verge between the entrance road and the Coppice and around the Dragonfly Ponds. However, evidence in the form of molehills can also be found in less hospitable areas like Poplar Field, the Coppice (both on stony ground) and on the Scrubland (damp, peat-like soil). A mole fortress was found on the Scrubland in the area beyond the end of the River Path. Mole fortresses look like giant molehills and can be about a foot (30cm)

high and two or three feet wide! They are not common and it is estimated that only one in 20 moles makes them. They are more common in areas prone to flooding with a high water table. Usually they contain a nesting chamber and a food store containing worms that have been paralysed by a bite to the head. This is not the first fortress on the Reserve. In previous years mole fortresses have been found on the Scrubland between the Dragonfly Ponds and the Barn Owl box and also on the bund between the Dragonfly Ponds and the River Path (all in notably damp locations) and also once on Tim's Field. It seems Rodley moles may be unusual in their willingness to undertake large construction projects.

Common Shrew *Sorex araneus*

Most unusually, there were no records this year. One or two often turn up in Longworth traps during small mammal surveys but not so this year. Dead animals are found most years as larger mammals such as Foxes will kill them but rarely eat them because of the foul tasting liquid produced from glands on the skin - but none were found this year.



Pygmy Shrew *Sorex minutus*

There have been no records in the last three years. The remains of this tiny mammal have been found in Barn Owl pellets but there had been no records of a live one on site until 2016 when one was caught in a Longworth trap on the Willow Path during a small mammal survey on 26th June.

Water Shrew *Neomys fodiens*

There were no records this year. Survey work done in the Reedbed some years ago showed this species to be present there and it is almost certainly present on the other wetland areas too. However, it is a very difficult mammal to spot. The last recorded sighting was on 9th December 2017 when one was seen on the Wet Grassland.

Harvest Mouse *Micromys minutus*

The Harvest Mouse breeding project started in 2012 and since 2014 mice have been introduced behind the Reedbed, Duck Marsh, on the Scrubland and more recently at a site close to the Lagoon. Four more releases were made this year between 24th May and 27th September, two of these on the Scrubland and two near the Lagoon. A total of 309 mice were released, some of these provided from Pudsey Park's breeding programme. On 7th June 12 Longworth traps were set near the Lagoon release site and six Harvest Mice were caught - four pregnant females and two juveniles. This was an encouraging result and showed that the

mice were doing well once released. On 13th December one was disturbed during reed cutting on the Wet Grassland (DAN).

Wood Mouse *Apodemus sylvaticus*

The Wood Mouse and Bank Vole are the two species guaranteed to turn up in Longworth traps during surveys - see Small Mammal Surveys for further details. They are also excellent climbers and are found living in nest boxes along the Willow Path most years. Four were found under a corrugated iron sheet in the Rodley Robins area on 26th June (PM/BM). The seed store is popular in the autumn and winter months. A total of seventeen were caught in Longworth traps here in November - all safely released some distance away. Or was it the same animal that kept coming back!

Bank Vole *Clethrionomys glareolus*

This is a very common small mammal here. Thirteen were caught in Longworth traps during a small mammal survey held on 22nd June for the Leeds Birdfair. One was also caught during a similar survey for Harvest Mice near the Lagoon on 7th June. Some years they are seen frequently under the bird feeders on the Willow Path but this year there was only one reported sighting and that was in the Manager's Garden on 3rd March (DC/EC). See Small Mammal Surveys for further details.

Field or Short-tailed Vole *Microtus agrestis*

With their preference for rough grassland full of tussocks the Scrubland provides ideal habitat for this species. This is almost certainly why they rarely turn up in Longworth traps during small mammal surveys which are usually carried out along the Willow Path and edge of the Coppice. From a study of pellets that have been found we know that they do figure highly in the diet of our Barn Owls and probably Kestrels too. In 2017 five were caught in Longworth traps during a survey on the Scrubland in the area around the Harvest Mouse release pens.

Water Vole *Arvicola amphibius*

The chances of seeing a Water Vole on the Reserve or on the river these days are very slim. This is now a rare mammal here. Loss of habitat and predation by American Mink have been major factors in their decline. In 2015 one was seen on three dates between 5th August and 4th October on the Dragonfly Ponds and Education Pond but there had been no sightings in 2016 or 2017. Tracks found on the riverbank in January 2018 may have been this species and there was a reported sighting of one by the river bridge on 23rd January that year but nothing since.

Brown Rat *Rattus norvegicus*

It is surprising there are not more sightings of this species considering the Reserve's proximity to the river. There was just one last year and two this year. On 16th June one was seen in the Bee Garden (MB) and on 30th November one was found in one of the metal storage containers by Tim's Field (PU).

Grey Squirrel *Sciurus carolinensis*

The number of records is increasing every year with the majority of sightings on the entry road between the main gates and Lagoon Hide. However, there were also sightings on the Willow Path and in the Manager's Garden and several dreys were again found on the Reserve.

Rabbit *Oryctogalus cuniculus*

This is a rare visitor to the Reserve, the last sighting of one being on 27th August 2016. Prior to 2016 there had been no sightings since 2011.

Brown Hare *Lepus capensis*

This is a very uncommon mammal in this part of the valley with just two records in the Reserve's history, the most recent on 10th April last year on the farmland. There was a surprise sighting this year on 27th January - one making its way through the Bee Garden to Mike Fisk Meadow (ES).

Hedgehog *Erinaceus europaeus*

A Hedgehog on the road just under the main gates during the evening of 19th July (JK) just about qualified as a Reserve record and it was only the third since it opened in July 2000. It was also the first record for 11 years. The population nationally is in decline but Rodley's location - surrounded by the river on three sides and improved grassland on the other - clearly doesn't help.

Common Pipistrelle Bat *Pipistrellus pipistrellus*

Pipistrelles are the commonest bats to be found on the Reserve. On 25th April numerous small bats seen by the Mike Sheldon Hide at 9.10pm (DW) were certainly a *Pipistrellus* sp. A group evening visit on 19th July produced very good numbers on the Willow Path and along the road from the Lagoon Hide to the Visitor Centre. The first Bat Night scheduled for 27th July had to be cancelled following a day of rain but the second on 21st September again produced very good numbers on the Willow Path. Unusually, there were several sightings in what was a relatively mild November. On 16th a small bat by the main gates during the day was almost certainly a *Pipistrellus* sp. On 20th November one flew out of the

thatched gazebo at 7.00am (JB). On 24th November at least six were seen on the Willow Path towards dusk (PM/JB) and one was seen over the compound about the same time (BM/MB). A small bat over the Butterfly Bank on 29th December could also have been this species (DC/EC).

Soprano Pipistrelle Bat *Pipistrellus pygmaeus*

Using bat detectors and based on the frequency of echolocation calls alone, this species again appeared to be present in good numbers along the Willow Path during an evening group visit on 19th July and the Bat Night on 21st September. It has only been a separate species since 1999 when the Common Pipistrelle was split into two species on the basis of different frequency echolocation calls. Usually found in wetland habitats, the Soprano Pipistrelle is undoubtedly particularly suited to the Willow Path area at Rodley.

Noctule Bat *Nyctalus noctula*

A number were recorded along the River Path and Winter Walk during a group evening visit on 19th July. Several were also recorded during the public Bat Night on 21st September. Unlike the other bats this large species can often be seen flying just before sunset and occasionally during the day.

Daubenton's Bat *Myotis daubentoni*

This medium-sized bat is often associated with water and seen flying low over lakes, ponds and canals just as dark is falling. Several bats flying over the Duck Marsh during evening visits may well have been this species as could a medium-sized bat seen over the river on 29th December (AL/PA).

SMALL MAMMAL SURVEYS

A survey was carried out at the Leeds Birdfair on Saturday 22nd June. Longworth traps were set at various locations round the Reserve the previous evening and the public were invited to participate at the opening of the traps. The results are shown below and they suggest a very healthy population of small rodents though, unusually, no Common Shrews were caught this time.

Date of Survey: 22rd June 2019 – Public Event (4th Leeds Birdfair)

27 Longworth traps set at three sites - 22 of these successful.

Location: Willow Path - Coppice side

20 Longworth traps set - 17 successful.

Species	No. caught	Comments
Woodmouse	5m+2f	One pregnant female One juvenile male
Bank Vole	2m + 8f	One juvenile male Two juvenile females

Location: Along Coppice fence facing Tim's Field

6 Longworth traps set - 4 successful

Species	No. caught	Comments
Woodmouse	1m	
Bank Vole	1m+2f	

Location: Behind Dipping Ponds

One Longworth trap set - one successful

Species	No. caught	Comments
Woodmouse	1m	

AMPHIBIANS

Smooth Newt *Triturus vulgaris*

This is a common species on the Reserve. Smooth Newts emerge from hibernation from late February onwards and head for the ponds where they breed. During the spring they can be found in good numbers in the Dragonfly Ponds, Dipping Ponds and Poplar Ponds. The larvae or newt tadpoles are often caught during pond dipping sessions. At the end of the breeding season they leave the ponds and spend the rest of the year on land. During the summer months they can often be found in damp places under logs and debris from where they emerge to feed on invertebrates. Looking under the corrugated iron sheets and logs in the Rodley Robins children's club area is nearly always productive.

Palmate Newt *Triturus helveticus*

This species may still be present in very small numbers but its preference is for shallow pools on acidic soils such as heathland and moorland. Detailed surveys are needed to establish its current status here. It was first recorded in 2010 and again in 2011. In the absence of any subsequent detailed surveys there have been no further confirmed records since 2011.

Common Frog *Rana temporaria*

This is a common amphibian on all the water bodies and it is easy to see at the Dragonfly Ponds in the spring when they arrive in numbers to spawn. The first frogs this year were recorded at the ponds on 27th February (PW/JLW) and just a few days later the first spawn was noted (JWC *et al*). Over the following days spawn was recorded on several of the Dragonfly Ponds, the ponds on Poplar Field and one of the Dipping Ponds. As usual, good numbers of tiny frogs could be found on the Willow Path in June and July. Grey Herons almost certainly take large numbers every year, even at the Dragonfly Ponds, but numbers remain high.

Common Toad *Bufo bufo*

This species has a tendency to return to ancestral breeding ponds and large numbers arrive in spring at the Dragonfly Ponds from the Scrubland where they have spent the winter. They usually breed a little later than Frogs and the first two this year were recorded on 15th March, one of these on the Education Pond (PJM). Just a week later they were present in good numbers, the Long Ditch and Pebble Beach Pond proving the most popular sites, their strings of spawn very different to the clumps of spawn produced by Frogs. Adult Toads spend little time in water and can tolerate much drier conditions than Frogs. During the summer months they can be

found under old logs round the Reserve and looking under the corrugated iron sheets in the Rodley Robins area is usually productive. Good numbers were seen along the paths during a guided bat walk on the evening of 19th July (JK).

REPTILES

Red-eared Terrapin *Trachemys scripta elegans*

Native to the southern United States and northern Mexico, it is a popular pet in this country and, unfortunately, is often released into the wild. The species was first recorded on the Reserve in 2013 and there were sightings in 2014 and 2017. Fortunately, there have been none since.

BUTTERFLIES

New moth species are added to the Reserve list every year but finding new butterflies is rather harder. One would have been nice but to record three this year was certainly surprising. A Brown Argus was the first on John Ackroyd Meadow on 19th May. There were subsequent reports in the same area with two on one occasion.

An Essex Skipper was the next to appear - this time on the River Path behind the Dragonfly Ponds on 24th July. This species has been extending its range north over recent years but it can easily be mistaken for a Small Skipper. The third new species was perhaps the least expected - a Dark Green Fritillary on a buddleia at the Mike Sheldon Hide on 31st July. One of our rarest and most rapidly declining species, this is mainly a butterfly of the uplands. But where did this one come from? Sadly, as with the Essex Skipper, there was only one sighting reported. Brown Argus and Essex Skipper are definitely two to keep an eye out for next year.

“Painted Lady Years” only come around every so often and 2019 was certainly one of them. The last one was as long ago as 2009 and whilst huge numbers arrived in the country that year numbers at Rodley were disappointing. To quote from our 2009 Butterfly Report - “ Despite the estimated billion Painted Ladies in the country, numbers on the Reserve were low with never more than three reported.” It was very different this year with more sightings than ever before and numbers really taking off in the first week of August with a 20+ count on 2nd. More double figure counts followed with a best of 30+ on 19th August. Last summer buddleias outside the Visitor Centre and by the entrance to the compound car park were almost devoid of butterflies. That certainly wasn't the case this year.

The decline of Peacocks and Small Tortoiseshells in recent years has been quite dramatic, the latter population declining by a massive 78% across the UK since the 1970s. Peacocks bounced back in style this year, a count of 41 on buddleias on 2nd August being by far the highest for many years. Small Tortoiseshell numbers, however, remained low, though it was by far the most frequently recorded butterfly on the Reserve this year.

Commas and Red Admirals were two of the other species enjoying the profusion of flowers on the buddleias this year, the latter taking second place as regards number of sightings and both butterflies having decent years. The top six most frequently recorded butterflies at Rodley in 2019 are shown below.

	Species	Position last year
1 st	Small Tortoiseshell	2 nd
2 nd	Red Admiral	-
3 rd =	Comma	3 rd =
3 rd =	Painted Lady	-
5 th	Peacock	-
6 th	Small White	3 rd =

In 2018 Speckled Wood was the most frequently recorded butterfly. This year it had slipped down to 7th place, not helped by a very wet autumn.

Brimstone had its best year to date with sightings on 30 dates, nine more than last year's previous best and with breeding almost certainly again occurring on the Butterfly Bank. Gatekeeper was another butterfly doing well this year. Since it first arrived in 2003 numbers had remained very low but in 2018 there were three double figure counts reported. This year there were more double figure counts.

Among the Lycaenidae numbers of Small Copper, Holly Blue and Common Blue remained low and the Purple Hairstreak, first recorded in 2016, showed no real signs of increasing its numbers with sightings on just two dates.

Of the white butterflies the Small White had another poor year, not helped by a disappointing crop of Fodder Radish on Tim's Field. Large White is almost certainly under-recorded with just a handful of records this year though the number of butterflies is certainly low.

Peter Murphy

HESPERIDAE

Essex Skipper (*Thymelicus lineola*)

This species is gradually spreading its way northwards, reaching the southern edges of Yorkshire around 1996. It is easily overlooked as it is very similar to the Small Skipper. Look for the sharply defined glossy black underside tips of the antennae which are indicative of Essex Skipper. One photographed on the River Path on 24th July (JWC) and clearly showing the antennae was the first record for the Reserve. There were no other reported sightings but it is clearly one to look out for next year.

Small Skipper (*Thymelicus sylvestris*)

Probably under-recorded, this species has, nevertheless, never been particularly numerous here at Rodley. Last year there was only one record of more than one butterfly. Sightings were only reported on nine dates this year but numbers of butterflies were better. A single butterfly at the side of Tim's Field on 15th June (JS/AL) was the first of the year. Poplar Field was the most productive site with three here on 7th July (PL), five on 14th July (AW) and three on 24th July (PM/BM). One on the River Path on 3rd August (MG/PG) was the last of the year.

Large Skipper (*Ochlodes venatus*)

Numbers were very similar to last year and still well short of the double figure counts of 2015. One on the Butterfly Bank on 9th June (JWC) was the first of the year, exactly the same date as last year. The best counts came in the few days from 27th June to 3rd July - five on 27th June (PM/BM), five on 29th June (JWC) and four on 2nd July (BM). There were sightings all around the Reserve, Poplar Field often featuring but with no more than two butterflies there. One there on 7th August (DC/EC) was the last of the year, some three and a half weeks later than last year.

PIERIDAE

Orange Tip (*Anthocharis cardamines*)

A male by the river bridge on 6th April (PA/JWC) was the first of the year, two weeks earlier than last year. There were plenty of sightings subsequently with one very high unconfirmed report of 20+ on 17th April but numbers otherwise were very similar to last year with no other double figure counts reported. Three males recorded on 25th May looked like being the last of the year but there were then two late sightings of a male by the Lagoon Hide (RAH) and a male at the edge of Tim's Field on 9th June, two days earlier than last year's final record.

Large White (*Pieris brassicae*)

Considering the fact that there is a *brassica* crop on Tim's Field every year the number of records of this species is surprisingly low. There were rather more records last year, though none involving more than four butterflies. This year there was just a handful of sightings reported, all of single butterflies, the first on the path to the Manager's Garden on 30th March (JKi) - this the earliest ever record at Rodley. The previous earliest record was on 17th April 2011. Last year the first butterfly was recorded on 18th April. There were then no further records until 14th July. One by the Visitor

Centre on 26th August (AW) was the last of the year, just one day later than last year.

Small White (*Artogeia rapae*)

The first brood usually emerges in April but we had to wait until 5th May for the first sighting last year. This year the first butterfly was recorded on the extraordinarily early date of 23rd February (JWC). There were no further records until 29th March when one was seen in the Bee Garden (BM). Numbers in the early part of the season are typically low and there were no reports of more than five butterflies throughout April, May and June. July usually produces the highest numbers with the emergence of the second brood and Fodder Radish in flower on Tim's Field is usually a magnet for them. However, a poor flowering last year resulted in much lower numbers than usual and there was no improvement this year. Double figure counts were few and the best was just 15 (DC/EC). The white butterflies are almost certainly under-recorded but results nevertheless were very disappointing. A single butterfly on John Ackroyd Meadow on 6th October was the last of the year (DC/EC), some two and a half weeks earlier than last year.

Green-veined White (*Artogeia napi*)

The number of sightings has been declining over recent years but there was a distinct improvement last year, though numbers of butterflies remained low. The first this year were reported on 17th April (BHe/GA), two weeks earlier than last year. Most reports were of just one or two butterflies but at least 10 were counted on 3rd August, most of these on Tim's Field (MG/PG). Three on 17th August (PLi) were the last of the year, nearly four weeks earlier than last year and the earliest last date since 2007.

Brimstone (*Gonepteryx rhamni*)

It was the best year to date for this species. There were sightings on 30 dates, nine more than last year's previous best and there were several reports of as many as four or five butterflies.

<u>Year</u>	<u>Number of days reported</u>
2013	5
2014	12
2015	20
2016	10
2017	17
2018	21
2019	30

Unless seen at the same time, care does need to be taken when assessing numbers as these are highly mobile, strong-flying butterflies and they can cover the length of the Reserve very quickly. A female on John Ackroyd Meadow on 20th March (JS) was the first of the year and the earliest ever record by five days (Previous earliest - 25th March in 2017 and 2018). A count of five on 13th May included three on the Butterfly Bank (DW). The following day five were reported here (RS/MG). On 25th May three males were seen on the Butterfly Bank with a further male in the Bee Garden (PM/BM). A single female in the Rodley Robins' garden on 3rd August looked like being the last of the year but there was then a report of one on the Butterfly Bank on 8th September (DC/EC). Several weeks later a male was seen from the Willow Path Hide on 16th October (DC/EC) - this the latest ever record for the Reserve.

NYMPHALIDAE

Wall (*Lasiommata megera*)

This species is a rarity here these days with just four records since 2012, the last on 5th August 2017. There were no reported sightings this year. This butterfly is a lover of dry, unfertilized places with an abundance of bare patches where it can bask which, of course, is not typical of the habitat here.

Speckled Wood (*Pararge aegeria*)

This species was the most frequently recorded butterfly last year, despite the fact that there were no sightings until 5th May. This year the first sighting was on the earliest ever date of 30th March - a single butterfly on John Ackroyd Meadow (DC/EC/JWC). The previous earliest was on 8th April 2015. There were no further sightings until 17th April but on 19th April a count of 10 included six in the Coppice and two on the Willow Path (PM/BM). Being lovers of dappled shade these are among the best places on the Reserve to find this species. There was another good count of 10+ on 24th July, the majority of these on the Willow Path (MG/PG) but the best count of the year came on 4th August - 16 in total and 14 of these along the Willow Path (PM/BM). Speckled Woods have been recorded to the end of October but a very wet month put paid to any thoughts of a sighting and two on John Ackroyd Meadow on 28th September (DC/EC) proved to be the last of the year, almost four weeks earlier than last year.

Small Heath (*Coenonympha pamphilus*)

First recorded on the Reserve in 2005, there have been no confirmed sightings since then.

Ringlet (*Aphantopus hyperantus*)

This butterfly can be very numerous during its relatively short flight period and there were two 50+ counts last year. The first sighting this year was of a single butterfly on the Butterfly Bank on 15th June (JS), only one day later than the earliest ever record on 14th June 2017. There were no further sightings reported until 29th June when four were recorded on Poplar Field (MG/PG), this one of the best sites on the Reserve for this species, as was proved on 7th July when between 40 and 50 were seen here (PL/ML). There was, however, only one other double figure count - a total of 24 on 14th July, 10 of these on Poplar Field (AW). Sightings continued into August but these were mainly of single butterflies. One on 17th August was the last of the year (PLi), more than three weeks later than last year. The latest ever record was on 19th August 2015.

Meadow Brown (*Maniola jurtina*)

A single butterfly on John Ackroyd Meadow on 9th June (JWC) was the first of the year - exactly the same date as last year. There were no further records until 27th June when one was again reported on John Ackroyd Meadow. Here and the Butterfly Bank typically produce the majority of sightings but ten were reported on Poplar Field on 29th June (MG/PG), this the first double figure count of the year. On 3rd July 15 were recorded on John Ackroyd Meadow (PM/BM). There were several further double figure counts, the best being 19 on Poplar Field on 14th July (JB). Two on Mike Fisk Meadow and on the Butterfly Bank on 26th August (AW) were the last of the year, just a week later than last year.

Gatekeeper (*Pyronia tithonus*)

Last year was the best to date for this butterfly which only reached Rodley in 2003. Numbers had remained in low single figures until 2018 when there were three double figure counts reported. The improvement continued this year with plenty of sightings and more double figure counts. One on Mike Fisk Meadow on 13th July (JWC) was the first of the year, some two weeks later than last year's earliest ever first date. The Butterfly Bank once again proved to be one of the most productive sites but Poplar Field also provided some good records, among them six males counted here on 24th July (PM/BM). A count of nine on the Butterfly Bank on 2nd August also included six males (PM/BM). A report of 12 on 3rd August was the best count of the year (MG/PG), the Butterfly Bank and Poplar Field again being the most productive sites. A count of 10 on the same date included five on the Butterfly Bank and four in the Rodley Robins' garden (PM/BM). There were sightings throughout August, numbers tailing off in the second half of the month. A single butterfly on John Ackroyd Meadow

on 1st September (DC/EC) was the last of the year, nearly four weeks later than last year.

Dark Green Fritillary (*Argynnis aglaja*)

This is mainly an upland species. It is found in all four Vice Counties but Brockadale NR produces some of the highest counts. It is known to be a wanderer but it was a complete surprise when one turned up on a buddleia by the Mike Sheldon Hide on 31st July (JS). There were no other reported sightings. This was a new species for the Reserve.

Red Admiral (*Vanessa atalanta*)

Last year produced a very early first record on 27th April. This year we had to wait until 2nd June when one was reported on John Ackroyd Meadow (JWC). There were regular sightings from 22nd June, often just of single butterflies but six around Poplar Field on 14th July (JB) was a good record and the best count of the year. Buddleias proved popular throughout August and September with five reported on them on 12th August (PM/BM) and four on the buddleias outside the Visitor Centre on 26th August (AW). Despite a very wet October the very few sunny days tempted one or two to some late flowers on the buddleias outside the Visitor Centre. One there on 16th October (PM/BM) was the last of the year, 12 days earlier than last year.

Painted Lady (*Vanessa cardui*)

2019 will long be remembered as the year of the Painted Lady. Numbers of this annual immigrant from North Africa have been disappointing in recent years but this year Britain had what was described as “the greatest influx for a decade”. One at the Dragonfly Ponds on 16th June (JWC) was the first of the year and there were regular sightings thereafter with up to five butterflies reported on occasions. However, numbers really took off in the first week of August with the highest counts ever recorded on the Reserve. Buddleias outside the Visitor Centre, compound car park, on the Butterfly Bank and by the Mike Sheldon Hide were all productive and there were numerous double figure counts. Between 2nd and 18th August there were reports of up to 20 butterflies on the buddleias but on 19th at least 30 were counted on and around the one buddleia at the entrance to the compound car park (PM/BM). This proved to be the last double figure count but several could still be seen on the buddleias for the next three weeks. The last sightings were on 15th September with single butterflies in the compound car park, at the edge of Tim’s Field and by the Wet Grassland (DC/EC *et al*).

Peacock (*Aglais io*)

The main summer emergence of Peacocks in the last four years has been very disappointing with buddleias outside the Visitor Centre often devoid of butterflies. With low numbers of overwintered butterflies appearing this year the chances of a good summer emergence seemed slim. One in the car park by the river bridge on 17th March (DC/EC) was the first of the year, almost a month earlier than last year's very late first date of 14th April. There were regular sightings thereafter but with very few reports of more than two butterflies. However, large numbers of caterpillars on nettles on the River Path in early July was an encouraging sign, as was a rare (these days) double figure count of 12 butterflies by the ramp to the Mike Sheldon Hide on 31st July (JS). The following few days produced some of the best counts for many years - 41 on buddleias on 2nd August (PM/BM), 32 on 3rd August (MG/PG) and 20 on 4th August (PM/BM). Numbers dropped away sharply in the second week of August with no reports of more than one butterfly after 18th August. One on the Willow Path on 18th September (DC/EC) was the last of the year, five days earlier than last year.

Small Tortoiseshell (*Aglais urticae*)

Following another poor year in 2018 the chances of seeing many overwintered butterflies this spring seemed very unlikely. Numbers were certainly low but there were three very early sightings in February, the first on 16th on the River Path (JWC), this the joint earliest ever record. After 27th February there were no sightings until 20th March and most subsequently were of just one or two butterflies. Among the better counts seven were reported round the Lagoon and Duck Marsh during habitat management work on 29th March (JB) and seven were seen on 19th April, five of these at the edge of Tim's Field (PM/BM). The first freshly emerged butterflies (eight) were recorded on 27th June, exactly the same date as last year, four of these round the Dragonfly Ponds (PM/BM). Subsequent counts, however, were disappointing with just one double figure count reported - 11 on 25th July with 10 of these on Tim's Field (PM/BM). In August buddleias outside the Visitor Centre and by the entrance to the compound car park produced one or two but it was generally very disappointing. Records were few and far between in September with no reports of more than one. A very wet October put paid to much late activity and one on the Willow Path on 27th October (JB) proved to be the last of the year, a month later than last year.

Comma (*Polygonum c-album*)

Prior to this year the earliest sighting of an overwintered Comma was on 10th March 2014 and last year there were no sightings until 14th April. This

year there were sightings on three dates towards the end of February. On 24th February one was seen on the path to the Manager's Garden (JWC). The next day one was reported near the containers (MG) and on 27th February there was a sighting of one on John Ackroyd Meadow (DC/EC *et al*). All three sightings may possibly have been of the same butterfly because there was only one other record in the following three weeks. There were then regular sightings of one or two. The first freshly emerged butterfly was seen on the River Path on 27th June (PM/BM) and there were reports of up to four in July. There were some better counts in August with seven on 2nd and eight on 3rd (PM/BM), mainly on buddleias with up to five in the Rodley Robins' garden. A very wet October put paid to many late sightings but the odd butterfly did appear on the brighter days and one on John Ackroyd Meadow on 27th October (JWC) was the last of the year, almost four weeks later than last year.

LYCAENIDAE

Small Copper (*Lycaena phlaeas*)

With three separate emergences this species can be seen from April until October, though we had to wait until 19th May for the first record this year - a single butterfly on John Ackroyd Meadow (JWC). There were several further reports in this area up until 9th June with three seen on 2nd June (JWC). The majority of sightings typically came from John Ackroyd Meadow and the adjacent Butterfly Bank. Last year there were numerous records in July. This year there was just one on 31st July - a single butterfly on Tim's Field (MHa). Sightings were reported on five dates in August though no observers reported more than two butterflies. One on the Butterfly Bank on the disappointingly early date of 24th August (JKi) was the last of the year. Thanks to some lovely sunny days Small Coppers were recorded through to 28th October last year.

Purple Hairstreak (*Quercusia quercus*)

Breeding on Oak, this species was first recorded in 2016 with three sightings. There were three records again in 2017 and four in 2018. Oaks at the edge of the Coppice along the Willow Path and in the Manager's Garden produced sightings last year and it was the same this year, albeit there were only three records on two dates. On 3rd August one was seen on an Oak on the Willow Path and another in the large Oak in the Manager's Garden (JWC). The next day three were reported on the Oak in the Manager's Garden (AL) and one on the Willow Path (JWC). The population is clearly still very small but will hopefully increase in years to come.

White-letter Hairstreak (*Satyrrium w-album*)

Usually associated with Wych Elms these days, this is a scarce butterfly on the Reserve with just four records, the last on John Ackroyd Meadow on 14th July last year - probably a wanderer from across the river. There were no reported sightings this year.

Holly Blue (*Celastrina argiolus*)

This has always been a scarce butterfly on the Reserve but last year was one of its better years with rather more records, albeit actual numbers of butterflies remained low. This year there were sightings on just eight dates and all of single butterflies. One on the Butterfly Bank on 21st April was the first of the year (PM), some two weeks earlier than last year. One in the Bee Garden on 12th May was the last until 4th August when one was seen on the Willow Path (JWC *et al*). There were records on four dates in August, the last of the year on 26th (DC/EC *et al*), just a week earlier than last year.

Brown Argus (*Aricia agestis*)

A new species for the Reserve this year, the first sighting of a single butterfly was on John Ackroyd Meadow on 19th May (JWC). On 25th May two were reported on the adjacent Butterfly Bank (JH *et al*). There were several further sightings of a single butterfly in the same area, the last on 9th June (JWC). Except at the northern edge of its range the Brown Argus has two adult broods a year, the first from mid-May to late June and the second from July to September. There was an unconfirmed report of one at the Dragonfly Ponds on 3rd July but nothing subsequently.

Common Blue (*Polyommatus icarus*)

This has never been a common butterfly here. It had its best year in 2015 but this was followed by a blank year in 2016, just six records of single butterflies in 2017 and single butterflies on just four dates in 2018. There was a small improvement this year but most of the sightings were in a three week period from 25th May to 15th June. Typically, almost all sightings were on John Ackroyd Meadow and the Butterfly Bank, the first here a female on 25th May (JWC). On 2nd June there were reports of two males (JWC) and three females (JS) and on 9th June two males again (JWC). There was also a report of a single female on Poplar Field on this latter date (RAH *et al*). The last sighting was on the early date of 3rd July - a male on John Ackroyd Meadow (BHe).

Butterflies

First and Last Dates - 2019

Species	First date	Last date
Essex Skipper	24 th July	24 th July
Small Skipper	15 th June	3 rd August
Large Skipper	9 th June	7 th August
Orange Tip	6 th April	9 th June
Large White	30 th March *	26 th August
Small White	23 rd February*	6 th October
Green-veined White	17 th April	17 th August
Clouded Yellow	-	-
Brimstone	20 th March*	16 th October*
Wall	-	-
Speckled Wood	30 th March*	28 th September
Small Heath	-	-
Ringlet	15 th June	17 th August
Meadow Brown	9 th June	26 th August
Gatekeeper	13 th July	1 st September
Dark Green Fritillary	31 st July	31 st July
Red Admiral	2 nd June	16 th October
Painted Lady	16 th June	15 th September
Peacock	17 th March	18 th September
Small Tortoiseshell	16 th February *	27 th October
Comma	24 th February *	27 th October
Small Copper	19 th May	24 th August
Purple Hairstreak	3 rd August	4 th August
White-letter Hairstreak	-	-
Holly Blue	5 th May	2 nd September
Brown Argus	19 th May	9 th June
Common Blue	25 th May	3 rd July

- * Large White - Earliest ever first date
- * Small White - Earliest ever first date
- * Brimstone - Earliest ever first date and latest ever last date
- * Speckled Wood - Earliest ever first date
- * Small Tortoiseshell - Joint earliest ever first date
- * Comma - Earliest ever first date

MOTHS

The first moth traps this year were set on the evening of 24th May, to be opened at an “Amazing Moths” event the following day. Despite cool conditions and a moderate westerly wind a good range of species were caught. The late start to the trapping season meant that a lot of the spring species were missed this year and a very wet autumn resulted in no trapping after the end of August. Despite the absence of the spring and autumn moths a total of 110 macro species and 65 micro species were recorded including several new ones for the Reserve.

New Macro Moths	New Micro Moths
Red-tipped Clearwing	<i>Tinea trinotella</i>
Marsh Pug	<i>Argyresthia retinella</i>
Muslin Footman	<i>Coleophora albicosta</i>
Dingy Footman	<i>Borkhausenia fuscescens</i>
Obscure Wainscot	<i>Epiblema cirsiiana</i>
	<i>Lathronympha strigana</i>
	<i>Calamotropha paludella</i>
	<i>Crambus pascuella</i>

The Reserve list now stands at 414 species - 226 macro species and 188 micros.

A light trap set on the Butterfly Bank on 12th July produced two of the new macro species - a Muslin Footman and an Obscure Wainscot. The latter is a local moth of reedbeds but it had its best year so far in Yorkshire in 2018 as regards number of records and it is hopefully expanding its range. The Dingy Footman was the second new Footman this year, seven being caught in one trap set on the Butterfly Bank on 27th July as part of the Reserve’s first ever Bioblitz event. Strangely, none were reported subsequently.

However, not all the new species were found in the light traps. A Red-tipped Clearwing was an excellent find at the Dragonfly Ponds on 30th June. This is a willow-feeding species and there was just one record in VC64 in 2018 (at Staveley NR). On 21st July two were attracted to pheromone lures in the same area. Marsh Pug is present in a variety of damp, grassy places in the county but there are few records and none in VC64 in 2018. One was photographed on John Ackroyd Meadow on 12th May.

Of the new micro moths *Calamotropha paludella* was an interesting find. This is a wetland species which is expanding its range. The larval foodplant is Bulrush so it should be at home here. One was caught in the light trap at the Bioblitz event on 27th July.

Among the day-flying moths the Small Yellow Underwing was recorded on several dates. This was a scarce moth in Yorkshire just a few years ago but it has been doing better in the last two or three years. There were sightings on four dates between 19th April and 19th May this year -all on John Ackroyd Meadow and the adjoining Butterfly Bank with as many as six moths on two occasions. It was yet another poor year though for the Cinnabar Moth with sightings on just two dates. The larval foodplant is Common Ragwort and it has to be removed from the two meadows before they are cut but it is still a common plant round much of the Reserve and the moth should be more common here than it is. The strikingly coloured caterpillars were found on Ragwort on the River Path, Poplar Field, by the path to the Manager's Garden and in the Rodley Robins' area but in very low numbers.

Burnet Moths have been hard to find in recent years but there was an improvement last year with several Six-spot Burnets reported on Mike Fisk Meadow in July. This year was disappointing with just single moths on two dates in July in the same area. Mike Fisk Meadow is certainly the best place to look for this species as the larval foodplant Common Bird's-foot Trefoil is at its most abundant here, particularly so at the western end of the meadow. Pignut, the larval foodplant of another day-flyer, the Chimneysweeper, is rather less common here which probably accounts for the scarcity of the moth itself. However, each year produces one or two records and there were two again this year - both on John Ackroyd Meadow on 2nd June.

As regards the migrant moths, the Silver Y had a poor year here in 2017 with just four caught in the light traps, a much better year in 2018 with 32 and a poor year again in 2019 with just five. Dark Sword-grass was recorded for the first time in 2017 and two were caught last year. This year just one was caught at the Bioblitz event on 27th July. There was to be no repeat of the huge influx of the Diamond-back Moth *Plutella xylostella* which occurred in 2016 but a total of 13 nevertheless turned up in the light traps. Records of what is perhaps the most spectacular of the migrant moths, the Hummingbird Hawkmoth, have been few and far between here but one was seen feeding on buddleia flowers outside the Visitor Centre on 25th August last year. This year one was again seen feeding on the same buddleias on 2nd August.

DRAGONFLIES AND DAMSELFLIES

2019 saw us awarded the accolade of 'Dragonfly Hotspot' by the British Dragonfly Society. It was a very good dragonfly year with records of one species that had not been seen previously at the reserve – the Small Red-eyed Damselfly (*Erythromma viridulum*). The Black Darter (*Sympetrum danae*) was recorded for the first time since 2014.

Absolute proof of breeding requires the recording of an exuvia or a teneral, either of which shows that a complete life-cycle has been achieved, and four species fit into this category – the Large Red Damselfly, the Banded Demoiselle and the Common and Ruddy Darters. It is highly probable that a species is breeding successfully if oviposition is observed. Eight more species fit into this category – the Azure, Blue-tailed, Common and Small Red-eyed Damselflies, the Brown and Southern Hawkers, the Emperor Dragonfly and the Broad-bodied Chaser. To this list could be added the Migrant Hawker, a pair of which were seen in the wheel formation, i.e. mating. In total, 18 species were recorded in 2019 - 7 damselflies and 11 dragonflies – of which 6 damselflies and 7 dragonflies are definitely or highly probably breeding on the reserve. It is important that observers keep an eye open for exuviae and teneralis in the future so that breeding records of more species can be confirmed.

Peter Mill

Large Red Damselfly (*Pyrrhosoma nymphula*)

It was another good year, with regular recordings throughout the flying season but mostly of just ones and twos. The first record of a teneral was on 22nd April at Scarborough Pond (JLW/PW); an exuvia was found on 24th April at the Dragonfly Ponds and emergence was witnessed on 29th April at Scarborough pond (DW). The first mature individual was recorded almost three weeks later, on 12th May (JLW). This gap fits in well with the time that it takes for individuals to mature away from water, i.e. about two weeks. Teneralis were also seen on 24th April at the Co-op and Scarborough Ponds and on 29th April at Scarborough Pond (PJM). All but two of the records of adults were from the Dragonfly Ponds. The exceptions were of a single male seen at the Poplar Ponds on 20th May (PJM) and of an individual on the John Ackroyd Meadow on 25th May (BM). The last record was at the Dragonfly Ponds on 22nd July (PJM).

Azure Damselfly (*Coenagrion puella*)

The first record was of one emerging on Woodhead Pond on 1st May (DG) and a male was seen on 4th May at the entrance to the Dragonfly Ponds (JWC). Numbers remained in single figures until the end of the third week of May when 15 were recorded at the Dragonfly Ponds (PJM). Numbers at the Dragonfly Ponds remained high until the end of July (Table 1), after which they were only seen in small numbers, the last record being on 26th August (PJM). The highest number of about 100 compares well with the maximum of 108 recorded in 2018. There were also good numbers on the Dipping Ponds in July (Table 1) but only a single record from the Poplar Ponds – a male on 20th May (PJM). Pairs in tandem were a common sight and oviposition was observed at both the Dragonfly and Dipping Ponds (PJM). Of great interest was a photograph of a species of *Coenagrion* found on the Willow Path (DG). It was originally thought that it might be the blue form of the Variable Damselfly (*Coenagrion pulchellum*). However, after wide consultation, it turned out to be the blue form of the Azure Damselfly.

Date	Total	Male	Female	Pairs in Wheel	Pairs in Tandem	Ovipositing
Dragonfly Ponds (including the Education Pond)						
20 May	15	10	4			
27 May	8					
3 June	8	6	2		1	1
22 June	c100					
8 July	32	28	4		3	1
15 July	61	51	10	1	6	3
22 July	13	10	3		2	
4 August	5	4	1			
Dipping Ponds						
8 July	15	13	2		1	1
15 July	22	18	4		2	

Table 1. Numbers of Azure Damselflies at the height of the season.

Common Blue Damselfly (*Enallagma cyathigerum*)

This is probably under-recorded on the reserve and more observations are needed in future years at the larger water bodies, as it tends to prefer this type of habitat over the smaller ponds. However, it was recorded on three occasions, the first of which was of an individual on the John Ackroyd Meadow on 12th May (JWC). Two individuals were seen on 27th May at the Dragonfly Ponds (JWC) and the last (and only other record) was on 12th August when a pair was seen ovipositing in Bruce's Pond (PJM).

Blue-tailed Damselfly (*Ischnura elegans*)

This species tends to keep low over the water and in the surrounding vegetation and so is probably under-recorded. The first record of the year was of an individual on 14th May in the Marsh area of the Dragonfly Ponds (RS). Numbers seen were generally low - around one to three. However, it was observed regularly from towards the end of May until the end of August. Most records were from the Dragonfly Ponds but individuals were also seen on the Education and Dipping Ponds (PJM) and behind the Reedbed (PM/BM). The only time that oviposition was seen was on Bruce's Pond on 19th August (PJM). The last record was on 8th September, when four males were seen at the Dragonfly Ponds (PW/JLW).

Emerald Damselfly (*Lestes sponsa*)

Numbers remained low at the Dragonfly Ponds, with the first record on 24th May (DW) but we had to wait until 6th July for the next record – of a female (JS/JLW). Just ones and twos were seen at the Dragonfly Ponds throughout most of August, the last records being on 26th August (DW & PJM). However, there was a good population at the Poplar Ponds. A single male was recorded there on 8th July (PJM) but, on 13th July, 25+ were noted (JLW). The apparent absence at the Poplar Ponds after that date is probably due to the absence of visits. There was little water in these ponds later in the summer and it is to be hoped that the colony there survives.

Small Red-eyed Damselfly (*Erythromma viridulum*)

This is a new species for the reserve and observations were recorded on several days in August. The first record was on 3rd August when 10+ were seen on the Wet Grassland, with at least one ovipositing (JWC), and a single male at the Dragonfly Ponds (JWC). There were further sightings at the Dragonfly Ponds over the next few days and then a gap in the records until 17th August (JWC). The last time it was seen was on 27th August, when a single male was observed on the Mabgate (AT) and Co-op (PW/JLW) Ponds. This species was first recorded in England in the southeast of the country in 1999. It has spread steadily northwards with other influxes from the continent also occurring. It is particularly interesting in that it may well be breeding on the reserve.

Banded Demoiselle (*Calopteryx splendens*)

Another excellent year for this species. The first record was of a male on 14th May at the Dragonfly Ponds (JLW/JS). As is to be expected, most sightings were near to the river, where it breeds, presumably in the stretch

of water adjacent to the reserve. The greatest numbers were seen on the River Bank by the bridge on 21st May (16 males and 7 females) (JB) and by the Fish Pass on 22nd June (30 males and 4 females) (PM/BM). A teneral was seen at the Fish Pass on 27th June (PM/BM). It was seen regularly at the Dragonfly Ponds, with the highest numbers recorded there being five females on 1st June (JWC), two males and three females on 27th June (PM/BM) and three males and a female on 15th July (PJM). Apart from these sites, it was seen, for example, on the Willow Path (PM/BM), behind the Reedbed (PM/BM), on the Duck Marsh (PM/BM) and on the River Walk (JWC). There were a few sightings of individuals well away from the river, including a sighting of a male on 2nd August on the road near the Dipping Ponds (PM/BM) and two records from near the Visitor Centre, one of a female on 22nd June (PM/BM) and one of a male on 2nd August (PM/BM). The last record was of a male at the Dragonfly Ponds on 26th August (JWC).

Common Hawker (*Aeshna juncea*)

This species had not been recorded since 2016. However, this year it was observed on four separate days in August, all at the Dragonfly Ponds. The first record was of a male on 7th August (PW/JLW and AT), while the last was on 26 August (PJM). The reserve is some distance away from its normal haunts of moorlands and bogs and all of the records could have been of the same individual.

Migrant Hawker (*Aeshna mixta*)

There were a number of sightings in 2019. The first record was of a male on the Dragonfly Ponds on 3rd July (JLW). Usually, just one or two were seen on any given day but a search of several sites (Dragonfly and Dipping Ponds, the Wet Grassland and the Willow Path Hide) on 28th September produced at least 10 individuals (JWC). The only evidence of reproductive behaviour was a pair in the wheel formation at the Education Pond on 12th October. The last sighting was of three males at the Dragonfly Ponds on 23rd October (JLW).

Southern Hawker (*Aeshna cyanea*)

It was a good year for the Southern Hawker. The first record was of an emerging adult at the Dragonfly Ponds on 30th June (JWC), followed by a pair of males at the same site on 3rd July (JLW). We then had to wait a month before the next sighting (4th August), when a male and an ovipositing female were seen on the Co-op Pond (PW/JLW). There were several records throughout August and early September but then there was another gap until observations on two days towards the end of

September. The last of these was on 28th September when two males were seen fighting each other over one of the Dipping Ponds (JWC).

Brown Hawker (*Aeshna grandis*)

This is one of the most frequently recorded dragonflies on the reserve. It was first seen on 22nd June at the Dragonfly Ponds (PJM). There were regular sightings throughout July and most of August, all but one of which was at the Dragonfly Ponds. The records during this period were mainly of ones and twos, the maximum being four on 12th August (PJM). There was just one record in September, on 8th, when three males and two females were seen (PW/JLW); this was also the last record of the year. The numbers were lower than in 2018, when more than 10 individuals were recorded on four occasions (JLW), the maximum being over 20 on 4th August that year. In 2019 there were four records of oviposition – in Bruce's Pond on 25th July (PM) in Co-op Pond on 4th August (PW/JLW) and 12th August (PJM) and in one of the Dipping Ponds on 17th August (PM/BM), the last of these being the only record not at the Dragonfly Ponds.

Emperor Dragonfly (*Anax imperator*)

It was a good year for the Emperor Dragonfly and it was seen on a number of occasions. The first record was on 29th June when a female was observed ovipositing on one of the Dragonfly Ponds (JWC). Oviposition was observed again on 3rd July in Co-op Pond (JLW) and on 25th July in Mabgate Pond (DW) and in the New Dipping Pond (PM). The first male was seen on 22nd July at the Dragonfly Ponds (PJM) and a pair were seen in the wheel formation on 24th July on the Lagoon (DW). After 25th July the records were all of males until the last record of the season, on 17th August, when a female was seen on the Dragonfly Ponds (JWC).

Four-spotted Chaser (*Libellula quadrimaculata*)

It was a disappointing year for the Four-spotted Chaser. It was only recorded on five occasions, all at the Dragonfly Ponds. This compares with sightings on 11 and 12 dates in 2017 and 2018 respectively. The first record was of an individual on 14th May (RS). There were then three more sightings of individuals, spaced out from mid-May to early July. The final record, of two males and a female on 6th July (JS/JLW), was rather more encouraging.

Broad-bodied Chaser (*Libellula depressa*)

It was a good year, with the first record being of a female on the Dipping Ponds on 18th May (JWC/JLW). There were further sightings, mostly at the Dragonfly Ponds but also on the Wet Grassland and on the Dipping

Ponds through until early July, with both males and females being seen. The highest number recorded on any one day was three males and a female on 3rd July (JLW). There were a couple of later sightings of single males, one on the path to the Manager's Garden on 22nd July (BM) and the other (final) one by the Dipping Ponds on 2nd August (PM/BM). In total there were recordings on 12 days. A pair in the wheel formation and an ovipositing female were seen at Bruce's pond on 1st June (JLW/JS). The only other record of oviposition was on 8th July, when a female was seen ovipositing in Chadwick Pond (PJM).

Common Darter (*Sympetrum striolatum*)

In terms of the number of sightings it was a rather average year for the Common Darter. The first record was at the Poplar Ponds on 3rd July (DG) but most records were from the Dragonfly Pond area, the first individual, a male, being recorded there on 6th July (JS/JLW). There was then a gap before the next recording, on 22nd July (PJM), and a further interval until 4th August, when a male was seen at the Co-op Pond (PW/JLW). Regular recordings were obtained over the next two weeks, including a tandem pair on the road by the Dipping Ponds on 17th August ((PM/BM) but there were then no further records until 8th September, when eight males and two females, including two tandem pairs, were seen at the Dragonfly Ponds (PW/JLW). This was the largest number seen on any one occasion (Table 2). This contrasts with 2018, when there were five dates on which more than 20 individuals were recorded (JLW), over 30 being recorded on 12th and 29th September of that year. In 2019 the next records were on 23rd September at the Dragonfly ponds (PJM) and on the 28th September at the Dragonfly Ponds, Wet Grassland, Willow Path Hide and Dipping Ponds, when at least six individuals were seen (JWC). There were only two more days when records were obtained – on 12th October at the Education Pond, including a pair in the wheel formation (JLW), and on 23rd October (the last of the season) at the Dragonfly Ponds, when four males and two females were seen, with one of the latter ovipositing (JLW). Oviposition was also observed in the Co-op Pond on 12th August (PJM) and in both Mabgate and Chadwick Ponds on 17th August (PM/BM).

Date	Total	Male	Fem	Pairs in Wheel	Pairs in Tandem	Ovip	Observer
8 th Sept	10	8	2		2		PW/JLW
28 Sept	6+						JWC
12 Oct	6	4	2	1			JLW
23 Oct	6	4	2			1	JLW

Table 2. Dates when more than five Common Darters were seen.

Ruddy Darter (*Sympetrum sanguineum*)

This species had not been recorded on the Reserve for a period of seven years until single confirmed sightings in each of 2017 and 2018. This year there have been records on six dates, the earliest being of a female at the Poplar Ponds on 13th July (JLW). On 21st July two individuals were seen at the Poplar Ponds, including a teneral (JLW), a clear sign of breeding. The first record at the Dragonfly Ponds was on 18th August (JLW) and one was recorded on the Education Pond on 21st August (JWC). The last record was of three males on the Dragonfly Ponds on 26th August (JWC).

Black Darter (*Sympetrum danae*)

This species has been recorded in only three years up until this year – single records in 2013, 2014 and 2018. This year there were three records, the first of which was of a male on 8th September at the Dragonfly Ponds (PW/JWC). A male was seen there again on 11th September (JS). The final sighting was of an old female in the Marsh area of the Dragonfly Ponds on 16th September (PJM). These individuals were well away from their normal habitat of heaths and moors.

Black-tailed Skimmer (*Orthetrum cancellatum*)

There were a similar number of sightings to those in the last two years. The first record was of a male, recorded on 29th June over the Wet Grassland (JWC). Single males were seen on 3rd July at the Dragonfly Ponds (JLW and DW) and at the Dipping Ponds (JLW). Two males were seen on the Wet Grassland on 24th July (PW); the last record was on 3rd August (JWC). No females were identified.

Keeled Skimmer (*Orthetrum coerulescens*)

Although it was seen on one occasion last year, there were no sightings this year, which is not surprising as it is really an inhabitant of boggy regions.

Terminology

Exuvia - The shed larval skeleton. Plural: exuviae

Ovipositing - The act of egg-laying

Teneral - A newly emerged adult dragonfly without the full coloration of the mature adult. Strictly speaking before its maiden flight.

Dragonflies and Damselflies

First and Last Dates - 2019

Species	First Date	Last date
Large Red Damselfly	22 nd April **	22 nd July
Azure Damselfly	1 st May **	26 th August
Common Blue Damselfly	12 th May *	12 th August
Blue-tailed Damselfly	14 th May	8 th September
Emerald Damselfly	24 th May	26 th August
Small Red-eyed Damselfly	3 rd August	27 th August
Banded Demoiselle	14 th May	26 th August
Common Hawker	7 th August	26 th August
Migrant Hawker	3 rd July *	23 rd October
Southern Hawker	30 th June	28 th September
Brown Hawker	22 nd June	8 th September
Emperor Dragonfly	29 th June	17 th August
Four-spotted Chaser	14 th May	6 th July
Broad-bodied Chaser	18 th May	2 nd August
Common Darter	3 rd July	23 rd October
Ruddy Darter	13 th July *	26 th August
Black Darter	8 th September	16 th September
Black-tailed Skimmer	29 th June	3 rd August
Keeled Skimmer	-	-

* Earliest ever record - Common Blue Damselfly, Migrant Hawker and Ruddy Darter

** Large Red Damselfly - Joint earliest ever record (with 2015 and 2017)

** Azure Damselfly - Joint earliest ever record (with 2011)

RODLEY'S POND LIFE IN 2019

In 2019 several of the Dragonfly Ponds were sampled along with the Education Pond, the Dipping Ponds and the Poplar Ponds. None of the larger water bodies were sampled. Frogspawn was recorded in some of the Dragonfly Ponds, the Poplar Ponds, and small amounts in the Education and Dipping Ponds. Large amounts were present in the Wet Grassland, some of which were translocated to the Dipping Ponds. The maximum number of toads counted on any one day was 76. This was lower than in 2018 but the count was probably taken a few days before the peak. However, it was just over two weeks earlier than the maximum count recorded in 2018. Smooth Newts and their young were recorded but it is several years since Palmate Newts were seen.

Aquatic Insects

Again the most common insect larva in all the ponds was that of the Pond Olive Mayfly *Cloëon dipterum*. The mass emergence of this species has still not been observed but this is unsurprising as it occurs at dusk when the reserve is closed. Anglers' Curse Mayfly *Caenis* sp (almost certainly *C. horaria*) was found commonly in the Education and Dipping Ponds. As usual the most regularly recorded odonate larvae were those of the Azure Damselfly *Coenagrion puella* but those of the Large Red Damselfly *Pyrrhosoma nymphula* and the Blue-tailed Damselfly *Ischnura elegans* were also recorded. In addition, the larvae of the Emerald Damselfly *Lestes sponsa* were found and these rather elegant long-legged creatures appear to be getting more common, especially in the Education Pond. Larvae of the Common Darter *Sympetrum striolatum* were regularly encountered. Last year we commented that Emperor Dragonfly (*Anax imperator*) were observed ovipositing in the large public Dipping Pond on a few occasions, so we hoped that pond dipping in 2019 would demonstrate successful breeding. So it was pleasing that on the first supervised pond dipping session in late March we found an Emperor larva; indeed they were found several times during the summer. Unfortunately we didn't find any exuviae in that pond, although they were found in other ponds in 2019 thus proving successful breeding again. As was noted last year Brown Hawker Dragonfly larvae *Aeshna grandis* were less common than in previous years in the Education Pond (although exuviae were found there), but Darter larvae (probably Common Darter *Sympetrum striolatum*) were more frequent and libellulid larvae were also recorded on several occasions. Libellulid larvae were also found in the Dipping Ponds.

As usual, three types of Water Boatman were regularly recorded – corixids, (front swimmers), *Notonecta* sp. (back swimmers) and *Plea minutissima* (the Pygmy Backswimmer). Pond Skaters were plentiful on all ponds, while the Saucer Bug (*Ilyocoris cimicoides*) was common but only in the ponds closer to the river. These predatory bugs are interesting as, although they have wings, they are unable to fly due to the fact that their flight muscles have atrophied. Inability to fly probably accounts for their failure to colonize the more elevated ponds on the reserve – they can crawl through damp grass or be spread by flood water but the 100 yards of Tim’s Field has proved a barrier to further colonisation so far. Water Scorpion *Nepa cinerea* and Water Stick Insect *Ranatra linearis* were both recorded. The latter occur regularly, especially in the Education Pond, and certainly breed there, given the numbers of tiny larvae found. They provide great interest for the visiting pupils. Again the Water Measurer *Hydrometra stagnorum* was not seen and has not been seen since 2016. The Water Scorpion *Nepa cinerea* was recorded from the Education Pond and the Dipping Ponds.

Caddis fly larvae were often recorded, but less often identified. Limnephilids were regularly found but the only ones identified were *Limnephilus rhombicus*, with its very distinct angular case, and *Glyptotaelius pellucidus*, which makes its case from fallen leaves and made good use of the willow leaves fallen into the Education Pond. The swimming leptocerid *Triaenodes bicolor*, with its green ice cream cornet-shaped case, was again common in the Education and Dipping Ponds. The true flies (dipterans) were represented by larvae of the Phantom Midges (*Chaoborus* sp. and *Psectrocladius obvius*), bloodworms (*Chironomus* sp.) and larvae of anopheline and culicine mosquitos. The Brown China-mark Moth *Elophila nympheata*, a pyralid, was again in evidence. Whirligig beetles (*Gyrinus* sp.) were, as usual, present in all ponds and an adult haplid beetle was identified. Larvae of *Hyphydrus ovatus*, a dytiscid beetle, were seen in 2018 and also found in 2019. Adult *Haliphus* beetles and Screech Beetles *Hygrobia hermanni* were recorded and, although other adult beetles were seen, none were identified. However, larvae of *Dyticus* sp. and *Colymbetes fulvus* were seen in the Education and Dipping Ponds.

Table 1. Aquatic insects

Ephemeroptera
 Baetidae
Cloëon dipterum

Caenis horaria (Angler's Curse)

Odonata

Zygoptera

Coenagrionidae

Coenagrion puella (Azure Damselfly)

Pyrrhosoma nymphula (Large Red Damselfly)

Lestidae

Lestes sponsa (Emerald Damselfly)

Anisoptera

Aeshnidae

Aeshna grandis (Brown Hawker)

Anax imperator (Emperor Dragonfly)

Libellulidae

Sympetrum striolatum (Common Darter)

Libellula sp.

Hemiptera

Heteroptera

Corixidae

Corixa sp. (Water Boatman – Front Swimmer)

Gerridae

Gerris sp. (Pond Skater)

Naucoridae

Ilyocoris cimicoides (Saucer Bug)

Nepidae

Nepa cinerea (Water Scorpion)

Ranatra linearis (Water Stick Insect)

Notonectidae

Notonecta sp. (Water Boatman - Back Swimmer)

Pleidae

Plea minutissima (Pigmy Back Swimmer)

Trichoptera

Leptoceridae

Athripsodes aterrimus

Triaenodes bicolor

Limnephilidae

Glyphotaelius pellucidus (Mottled Sedge)

Limnephilus rhombicus

Limnephilid larvae

Diptera

Nematocera

Chaoboridae

Chaoborus sp (Phantom Midge)

Chironomidae

Chironomus sp

Psectrocladius obvius (Non-biting Midge larva)

Culicidae

Culicine Mosquito

Anopheles sp.

Lepidoptera

Pyralidae

Elophila nympheata (Brown China-mark Moth)

Coleoptera

Dytiscidae

Hyphydrus ovatus [larva]

Dytiscus sp.

Colymbetes fuscus (larva)

Gyrinidae (Whirligig Beetles)

Gyrinus sp.

Haplidae

Halplus sp.

Hygrobiidae

Hygrobia hermanni (Screech Beetle)

Other Aquatic Invertebrates

As in 2018, two species of flatworm were recorded *Schmidtea* (*Dugesia*) *lugubris* and *Polycelis nigra*. Leeches were regularly found but only one was identified, namely *Erpobdella Testacea*.

Amongst the crustaceans, the Freshwater Shrimp (*Crangonyx pseudogracilis*), the Water Slater (*Asellus aquaticus*), the Water Flea *Daphnia* sp. and *Cyclops* sp. were all common. Nauplii larvae of *Cyclops* sp were identified for the first time. Gastropod molluscs were represented by the usual species - the Great Pond Snail (*Lymnea stagnalis*), Great Ramshorn Snail (*Planorbarius corneus*), Keeled Ramshorn Snail (*Planorbis carinata*) and the Wandering Pond Snail (*Radix balthica*) were all recorded frequently. The Bladder Snail (*Physa fontinalis*) wasn't recorded this year but a new species for the reserve was the tiny Jenkin's

Spire-Shell – *Potamopyrgus antipodarium*. As the name suggests, this is a non-native species from Australasia which was accidentally introduced to the UK in the 19th century and is now found across the whole country. Small bivalve molluscs were also found in many of the ponds but these are not easy to identify, but included examples that were probably Freshwater Cockles (Orb Mussels) and smaller pea mussels.

Table 2. Other aquatic invertebrates

- Platyhelminthes
 - Dugesiidae
 - Schmidtea (Dugesia) lugubris*
 - Planariidae
 - Polycelis nigra*

- Annelida
 - Hirudinea
 - Erpobdellidae
 - Erpobdella testacea*

- Crustacea
 - Branchiopoda
 - Cladocera
 - Daphnia* sp. (Water Flea)
 - Copepoda
 - Cyclops* sp. (Water Flea)
 - Malacostraca
 - Amphipoda
 - Crangonyx pseudogracilis* (Freshwater Shrimp)
 - Isopoda
 - Asellus aquaticus* (Water Slater)

- Mollusca
 - Gastropoda
 - Hydrobiidae
 - Potamopyrgus antipodarium* Jenkin's Spire Shell
 - Lymnaeidae
 - Radix balthica*
 - Lymnea stagnalis* (Great Pond Snail)

 - Planorbidae
 - Planorbarius corneus* (Great Ramshorn Snail)

Planorbis carinata (Keeled Ramshorn Snail)

Bivalva
Sphaeriidae

We should like to thank Pam Hunt and Joe Babic and indeed the whole of the education group for their help in catching and identifying much of our pondlife.

Jerry Knapp & Peter Mill.

Spiders and other Terrestrial Invertebrates of Rodley Nature Reserve. A detailed summary of a survey undertaken in 2019.

Introduction

In 2008 and 2009, I first surveyed the Reserve for its spiders and reported the results in the annual reports (Wilson, 2009; Wilson, 2010); plus submitted an article to the Yorkshire Naturalists' Union journal, *The Naturalist* (Wilson, 2012). This effort resulted in 66 species of spider being recorded by focusing on pitfall trapping, sweeping vegetation and beating vegetation.

Ten years on from the second survey, I thought it would be timely to undertake an updated survey within the Reserve. As my interests have expanded in the interim decade to additional invertebrate groups, whilst the focus was very much on recording spiders, effort was also given to collect and identify other groups, including bugs (Hemiptera), beetles (Coleoptera), aculeate ('stinging') Hymenoptera (bees and wasps) and flies (Diptera).

This article summarises the results of the 2019 survey work. A full report has been provided to the Reserve's Trustees.

Methods

Unlike the 2008 and 2009 surveys, no pitfall trapping was undertaken. Instead, reliance was placed on active methods, of which vacuum sampling was a new approach for surveying the Reserve. A modified garden blow-vac was used to Hoover up ground-dwelling and field layer invertebrates. This is a commercially available machine normally used to clear leaves and other detritus off lawns/ drives by sucking the material up, through the shredding element and in to a collection bag. However, the modification part is a bespoke bag which is attached to the inlet nozzle such that the material (leaves, mosses etc) plus invertebrates are collected. This is then tipped in to a sieve and shaken over a white tray. Small invertebrates, particularly spiders and smaller beetles and bugs are then collected in a pooter.

Supplementing the vacuum sampling, sweeping and beating vegetation plus sieving leaf-litter and moss were also undertaken.

Results

Seven site visits took place from early May until mid-September 2019, fitting around paid work commitments. Furthermore, the opportunity to visit on 'volunteer days' (Monday or Friday) meant that it was possible to survey in habitats and compartments which had not previously been

investigated. This included the reed-fen and drier grassland habitats either side of the Lagoon, Duck Marsh and Wet Grassland compartments. In addition to the field work undertaken in 2019, West Yorkshire Ecology (the local biological recording centre) and Dr. Peter Mill, provided historical data on invertebrate species held by them from the Reserve. Thus, the opportunity has also been taken to summarise what invertebrates have been recorded within the Reserve since it was established in 2000. This data is summarised in Table 1.

Table 1: Invertebrate Species recorded at Rodley Nature Reserve in 2019 and total recorded.

Invertebrate Group	Number of Species Recorded (2019)	Total Recorded on Reserve (2000 to 2019)
Arachnida, Araneae (spiders)	60	82
Arachnida, Opiliones (harvestmen)	5	6
Coleoptera (beetles)	140	207
Diptera (flies)	37	142
Hemiptera (bugs, including 'hoppers)	39	90
Hymenoptera (bees, wasps, ants, sawflies and allies)	15	55
Lepidoptera (butterflies & moths)	15	423
Odonata (dragonflies and damselflies)	4	19
Other groups (e.g. Orthoptera (grasshoppers & crickets))	3	66

The survey effort in 2019 recorded 318 species of terrestrial invertebrate, of which 60 species were spiders. This added 15 species of spider to the Reserve's list (one species was added between 2009 and 2019), which is now approaching 100 species.

Five species are more unusual, having a nature conservation status (referred to as Key Species). Table 2 lists all Key Species recorded from the Reserve between 2008 and 2019, with commentary on their ecology.

Table 2: Key Species Recorded at Rodley Nature Reserve by the surveyor between 2008 and 2019.

Taxa	Status	Ecology
Araneae, Linyphiidae <i>Porrhomma errans</i>	Nationally Scarce	This money-spider was captured in 2009 from pitfall traps set in the grassland. This is a species whose precise habitat requirements are unknown, although all previous records are associated with

Taxa	Status	Ecology
		grassland of some description (Harvey, Nellist and Telfer, 2002).
Araneae, Linyphiidae <i>Entelecara congenera</i>	Nationally Scarce	Another money-spider that is a scarce species, typically recorded on pine, gorse (<i>Ulex europaeus</i>), heather (<i>Calluna vulgaris</i>) and other bushes (Harvey, Nellist and Telfer, 2002). The specimens were collected from gorse in 2009.
Coleoptera, Staphylinidae <i>Anotylus mutator</i>	Notable	A rove-beetle of decomposing substrates such as dung, carrion and accumulated plant debris (Lott, 2009) where it may be found across a range of grassland, wetland, coastal and wooded habitats.
Coleoptera, Coccinellidae <i>Hippodamia variegata</i> (Adonis' ladybird)	[Nationally Scarce (Nb)]	The Adonis' ladybird occurs in vegetation close to drier, free-draining substrates in southern, central and eastern England as far north as Yorkshire (Roy <i>et al.</i> , 2012). Whilst Yorkshire is towards the northern end of its range, it has become more frequent in recent years and no longer deserves its Nationally Scarce status.
Coleoptera, Chrysomelidae <i>Agelastica alni</i> (Alder leaf-beetle)	Data Deficient; Nationally Rare	A leaf-beetle previously considered to be extinct in the UK, but since the mid-2000s, it has reappeared, starting from a core area in the Greater Manchester area and subsequently spreading eastwards and in to Yorkshire by 2012. It is assumed to have been accidentally imported with nursery stock of alder (<i>Alnus</i> sp.), its foodplant, and it is now reasonably widespread in the north-west England and in to north Wales (Buckland and Buckland, 2014; Hubble, 2014). It no longer merits a nature conservation status.
Coleoptera, Curculionidae <i>Magdalis cerasi</i>	[Nationally Scarce (Nb)]	A dull black weevil distributed locally throughout England and Wales where it occurs in woodland, scrub and hedgerows on oak and also on shrubs of the rose-family, particularly hawthorn. The larvae feed inside branches and dead twigs. Adults can be found between May and August (Hyman, 1992).
Diptera, Sciomyzidae	Notable	This snail-killing fly occurs in temporary and permanent marshes and swamps, and around ponds and other standing

Taxa	Status	Ecology
<i>Pherbellia griseola</i>		water with fluctuating water-levels. The larvae feed in exposed freshwater snails (Falk, 1991).
<p>Key</p> <p>Nationally Rare species are those that are roughly equivalent to the old Red Data Book categories. These are defined as occurring in 15 or fewer hectads (10 km Ordnance Survey grid squares) and where there is reasonable confidence that intensive recording effort won't increase the number of hectads above 15.</p> <p>Nationally Scarce species are those that have not been recorded in more than 100 hectads, and where there is reasonable confidence that intensive recording effort won't increase the number of hectads above 100.</p> <p>Notable species are, or are likely to be, restricted to 16 - 100 hectads in Britain. For some better recorded invertebrate taxa, they were further divided between Notable-A (Na) for species thought to occur in 30 or fewer hectads, and Notable-B (Nb) for those thought to occur between 31-100 hectads. These are referred to as Nationally Scarce (Na), or Nationally Scarce (Nb). Where a status has been placed in square brackets, e.g. [Nationally Scarce (Nb)], this denotes that in the professional judgement of the specialists, this status is unreliable, but they have not been formally reassessed against up to date criteria.</p> <p>Data Deficient (DD) is assigned to species where there is uncertainty to their conservation status when assessed against international criteria.</p>		

The additional effort to record other invertebrate groups has resulted in a substantial number of new taxa for the Reserve; many of which are likely to go largely unnoticed by the typical visitor. These may include shieldbugs, planthoppers and froghoppers, beetles, flies, solitary bees and wasps; all of which have specific, as well as more general habitat requirements. The assemblage recorded can be evaluated using an on-line analytical software package to provide a more detailed understanding of the Reserve's biotopes such as wetlands (includes the reedbeds and marsh); or open habitats (includes grasslands and ruderal vegetation) which can then be used to inform future habitat management. Initial analysis presented in Table 3 has identified those biotopes and the habitats they support which are considered to be particularly important for invertebrates.

Table 3: Important habitats for invertebrates (based on data collected between 2008 and 2019).

Broad Biotope	Habitat	Species-richness	Key Species
Open Habitats	Tall sward & scrub	162	<i>Hippodamia variegata</i> [NS (Nb)]

Broad Biotope	Habitat	Species-richness	Key Species
			<i>Anotylus mutator</i> (Notable)
Wetland	Peatland	38	<i>Pherbellia griseola</i> (Notable)
Wetland	Marshland	27	
Tree-associated	Arboreal	23	<i>Entelecara congenera</i> (NS) <i>Agelastica alni</i> (DD; NR)
Tree-associated	Shaded woodland floor	12	
Open Habitats	Short sward & bare ground	12	<i>Porrhomma errans</i> (NS)
Tree-associated	Decaying wood	10	<i>Magdalis cerasi</i> [(NS(Nb))]
Wetland	Running water	4	
Wetland	Wet woodland	2	
Tree-associated	Wet woodland	2	
Open Habitats	Upland	2	
Coastal	Brackish pools & ditches	1	

It is interesting to note the range of biotopes and the different habitats present that support the various invertebrate assemblages recorded. The analysis suggests that the tall grassland and scrub, which includes the hedgerows and willow plantation is an important habitat within the Reserve. However, the analysis has also identified that the wetlands present at Rodley can be divided in to four distinct types: peatland (undisturbed/ limited disturbed wetlands), marshland (disturbed wetlands), running water and wet woodland. This emphasises that the invertebrate assemblages present on the Reserve are dependent on having a mix of different wetlands, some of which are associated with disturbance levels (peatland versus marshland); and others associated with structure (wet woodland). This can be translated in to habitat management by, for example, creating a varied regime of non-intervention/ very low management input through to more regular vegetation manipulation such as reed-cutting.

A second analysis has looked at the number of stenotopic species recorded on the Reserve (

Table 4). Stenotopic species have very specific and restricted habitat requirements and they can be considered, in addition to those with a nature conservation status, as important indicators of the Reserve's intrinsic nature conservation value. A total of 26 stenotopic species have been recorded within the Reserve and these are listed in Table 4.

Table 4: Stenotopic species recorded (based on data collected between 2008 and 2019).

Order	Family	Species	Conservation status	Specific Assemblage Type
Diptera	Syrphidae	<i>Myathropa florea</i>		Heartwood decay
Coleoptera	Cerambycidae	<i>Clytus arietis</i>		Bark & sapwood decay
Coleoptera	Curculionidae	<i>Magdalis cerasi</i>	[Nb]	Bark & sapwood decay
Coleoptera	Malachiidae	<i>Malachius bipustulatus</i>		Bark & sapwood decay
Coleoptera	Scraptiidae	<i>Anaspis frontalis</i>		Bark & sapwood decay
Coleoptera	Scraptiidae	<i>Anaspis maculata</i>		Bark & sapwood decay
Hymenoptera	Chrysididae	<i>Trichrysis cyanea</i>		Bark & sapwood decay
Hymenoptera	Crabronidae	<i>Psenulus pallipes</i>		Bark & sapwood decay
Hymenoptera	Sapygidae	<i>Sapyga quinquepunctata</i>		Bark & sapwood decay
Diptera	Asilidae	<i>Dioctria rufipes</i>		Scrub edge
Lepidoptera	Nymphalidae	<i>Pararge aegeria</i>		Scrub edge
Lepidoptera	Nymphalidae	<i>Pyronia tithonus</i>		Scrub edge

Order	Family	Species	Conservation status	Specific Assemblage Type
Hymenoptera	Andrenidae	<i>Andrena chrysoseles</i>		Scrub edge; Rich flower resource
Coleoptera	Apionidae	<i>Exapion ulicis</i>		Scrub edge; Scrub-heath & moorland
Hemiptera	Pentatomidae	<i>Piezodorus lituratus</i>		Scrub edge; Scrub-heath & moorland
Hymenoptera	Andrenidae	<i>Andrena cineraria</i>		Rich flower resource
Hymenoptera	Apidae	<i>Apis mellifera</i>		Rich flower resource
Hymenoptera	Apidae	<i>Bombus lapidarius</i>		Rich flower resource
Hymenoptera	Apidae	<i>Bombus pratorum</i>		Rich flower resource
Hymenoptera	Apidae	<i>Bombus terrestris</i>		Rich flower resource
Hymenoptera	Apidae	<i>Nomada marshamella</i>		Rich flower resource
Hymenoptera	Colletidae	<i>Hylaeus communis</i>		Rich flower resource
Hymenoptera	Halictidae	<i>Lasioglossum albipes</i>		Rich flower resource
Coleoptera	Carabidae	<i>Curtonotus aulicus</i>		Scrub-heath & moorland
Coleoptera	Staphylinidae	<i>Olophrum piceum</i>		Scrub-heath & moorland
Araneae	Lycosidae	<i>Pardosa palustris</i>		Short sward & bare ground

The value of this table is that it identifies the specific elements (Specific Assemblage Types (SAT)) within each habitat that are of particular nature conservation importance. For example, there are different types of dead wood: the heartwood of larger trees, possibly represented by the larger crack willows (*Salix fragilis*) which form rot-holes, allowing fungi to penetrate the centre (heartwood) of the tree, providing the breeding

habitat for the hoverfly *Myathropa florea*. And decay present in smaller girth trunks, stumps or branches which forms within old wood beetle burrows which provide a nesting habitat for the pale-footed black wasp (*Psenulus pallipes*) and a cuckoo-wasp *Trichrysis cyanea*. Furthermore, the detailed analysis has identified that for certain species such as the hawthorn mining bee (*Andrena chrysoceles*), the gorse weevil (*Exapion ulicis*) and the gorse shieldbug (*Piezodorus lituratus*), it is the mosaic of grasslands, grassland and scrub edge and bramble scrub which are necessary.

So whilst the diversity of wetlands is generally recognised as being of value for the Reserve's birds, otter (*Lutra lutra*) and some invertebrates, the 2019 survey has identified more discreet elements of each habitat that are important, some of which may be under-appreciated.

Further Work

Further survey will continue to take place, commencing in January 2020. Surveying for invertebrates in winter might be counter-intuitive, but there are actually some spiders that are winter active, and indeed, within the litter-layer, a fauna is present, but not often surveyed. It will be interesting to investigate what is present within in the Reserve at this time of year.

Richard Wilson

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FUNGUS REPORT

A wet but generally mild autumn proved ideal for fungi and the two forays held this year produced a very good range of species and had a good following of participants. The public foray held on 20th October produced 47 species. The Rodley Robins children's club foray held on 9th November was also successful, adding several additional species to the list for the year.

<i>Ascocoryne sarcoides</i>	Purple Brain Fungus	Bee Garden
<i>Auricularia auricula-judae</i>	Jelly Ear	Path to Manager's Garden + Coppice
<i>Bjerkandera adusta</i>	Smoky Bracket	Coppice
<i>Bolbitius titubans</i>	Yellow Cow-pat Toadstool	Poplar Field
<i>Claviceps purpurea</i>	Ergot	Path to Manager's Garden
<i>Clavulina rugosa</i>	Wrinkled Club	Coppice
<i>Clitocybe dicolor</i> aka > <i>C. metachroa</i>	No English name	Roadside -grass verge
<i>Clitocybe rivulosa</i>	Fool's Funnel	Roadside -grass verge
<i>Collybia dryophila</i>	Russet Toughshank	Hedgerow - roadside
<i>Coprinellus micaceus</i>	Glistening Inkcap	Bee Garden + Coppice
<i>Cortinarius sp.</i>	A Webcap	Path to Manager's Garden
<i>Crepidotus cesatii</i>	Roundspored Oysterling	Coppice
<i>Dacrymyces stillatus</i>	Common Jellyspot	Mammal Tower
<i>Daedaleopsis confragosa</i>	Blushing Bracket	Path to Manager's Garden + Coppice
<i>Erisphye heracleid</i>	Hogweed Mildew	Everywhere
<i>Exidia thuretiana</i>	White Brain	Bee Garden
<i>Flammulina velutipes</i>	Velvet Shank	Coppice
<i>Ganoderma australe (adspersum)</i>	Southern Bracket	Coppice
<i>Heboloma crustuliniforme s.</i>	Poison Pie	Hedgerow - roadside
<i>Hygrocybe chlorophana</i>	Golden Waxcap	Mike Fisk Meadow + roadside
<i>Hygrocybe conica</i>	Blackening Waxcap	Mike Fisk Meadow + roadside

<i>Hygrocybe miniata</i>	Vermilion Waxcap	
<i>Hygrocybe virginea</i>	Snowy Waxcap	Mike Fisk Meadow
<i>Hyphodontia sambuci</i>	Elder Whitewash	Path to Manager's Garden + Coppice
<i>Inocybe rimosa</i>	Split Fibrecap	
<i>Inocybe sp.</i>	Fibrecap sp.	Coppice
<i>Laccaria laccata</i>	The Deceiver	Mike Fisk Meadow + Coppice
<i>Lepista nuda</i>	Wood Blewit	Hedgerow - roadside
<i>Lycoperdon excipuliforme</i>	Pestle Puffball	MF Meadow and Path to Manager's Garden
<i>Marasmius oreades</i>	Fairy Ring Champignon	Mike Fisk Meadow
<i>Mycena aetites</i>	Drab Bonnet	Various
<i>Mycena arcangeliana</i>	Angel's Bonnet	Path to Manager's Garden + roadside
<i>Mycena filopes</i>	Iodine Bonnet	Roadside - grass verge
<i>Mycena speirea</i>	Bark Bonnet	Mammal Hotel
<i>Mycena vitilis</i>	Snapping Bonnet	Grass by Visitor Centre
<i>Nectria cinnabarina</i>	Coral Spot Fungus	Coppice
<i>Panaeolina foeniseccii</i>	Brown Hay Cap	Roadside - grass verge and Mike Fisk Meadow
<i>Panaeolus sp.</i>	Mottlegill sp.	Mike Fisk Meadow
<i>Parasola plicatilis</i>	Japanese Parasol	Various
<i>Paxillus involutus</i>	Brown Rollrim	Hedgerow - roadside
<i>Pholiota squarrosa</i>	Shaggy Scalycap	Coppice
<i>Phragmidium violaceum</i>	Violet Bramble Rust	Roadside
<i>Pleurotus ostreatus</i>	Oyster Mushroom	Coppice
<i>Psathyrella piluliformis</i>	Common Stump Brittlegill	Coppice
<i>Rhytisma acerinum</i>	Tar Spot	Manager's Garden on Sycamore leaves
<i>Scleroderma verrucosum</i>	Scaly Earthball	Coppice + Hedgerow - roadside
<i>Stereum hirsutum</i>	Hairy Curtain Crust	Coppice
<i>Trametes versicolor</i>	Turkeytails	Coppice + Path to Manager's Garden

<i>Xanthoria parietina</i>	Yellow Sunburst Lichen	Everywhere
<i>Xylaria hypoxylon</i>	Candlesnuff Fungus	Coppice

Like last year, the Coppice proved particularly productive and a full circuit of the outer path was walked, giving visitors access to a part of the Reserve not normally open to the public.

One of the highlights of the forays this year was the masses of Wrinkled Club *Clavulina rugosa* growing along the path in the Willow Coppice. It is a fairly common species but it was the first time we have recorded it at the reserve - and it was abundant! Each individual club looks like a tiny cartoon ghost and there were so many, it was hard not to tread on any of these little 'people'. One of the thrills of a fungus hunt is it can be quite unpredictable, from year to year, as to what you will find. The fungus may well have been there on the roots of the willows ever since they were planted. They are very beneficial to the tree helping it to gather nutrients, trace elements and moisture from the soil. Only when all the conditions are just right will it send up the clubs above ground to disperse its spores into the air. The Wrinkled Club is not confined to willows and the spores may eventually end up near the roots of a birch, oak or pine and bestow its benefits there. It is said to be edible but they are best left to feed voles and mice. Fungi can be an important food source for small mammals in the autumn.

Another interesting fungus was the Fool's Funnel *Clitocybe rivulosa*. This looks very similar to the edible and much sought Fairy Ring Champignon that also grows on the reserve. Both may form fairy rings. You would be foolish indeed to eat the former though. It causes profuse sweating, salivating and tears followed by stomach pains, blurred vision, difficulty breathing and sometimes even death. Other names for it include False Champignon and the Sweating Mushroom. Bizarrely the antidote for this poison is atropine, a substance found in Deadly Nightshade.

A big thank you to Andy Woodall for leading two excellent forays and for providing the interesting information above.

Photograph Credits

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