



Reserve Opening Times:

Wednesday: 10am - 4pm
Saturday: 10am - 4pm
Sunday: 10am - 4pm

Trustees:

Richard Fuller - Treasurer
Alan Patchett
David Nesham
John Brook
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Company Secretary - Peter Murphy

Report Editor: Peter Murphy

CONTENTS

3	Introduction
7	Monthly Roundup 2012
30	Introduction to the Systematic List of Birds
32	Systematic List of Birds Recorded
79	First and Last Dates for Winter Visitors 2012
80	First and Last Dates for Summer Visitors 2012
81	Mammals
87	Small Mammal Surveys
89	Amphibians
91	Butterflies
100	Butterflies - First/Last Dates 2012
101	Moths
103	Dragonflies and Damselflies
109	Dragonflies and Damselflies – First/Last Dates 2012
110	Invertebrates in the Dragonfly Ponds
116	The Education Dipping Pond
123	Harlequin Ladybirds at Rodley - An Update
124	Tree Bumblebees at Rodley - An Update
124	A New Shieldbug for the Reserve
125	Wetland Bird Survey
125	Botanical Surveys
126	Survey of Algae in 2012
127	Fungus Report 2012
129	Acknowledgements

Illustrations:

Cover photograph - Small Copper - from an original photograph by Barbara Murphy

Waxwing - by John Conlin. Wall brown - by Peter Larner

Dragonfly nymph/larva and water scorpion - by Jerry Knapp

Other photographs by Barbara Murphy

Introduction

Another eventful year was dominated somewhat by work on the fish pass which finally started in April. Scheduled for completion in September, the wettest summer in more than 100 years put a bit of a damper on things and work was often hampered by high river levels and a sea of mud. The inevitable delays resulted in the contractors being on site until early December. Whilst there was inevitably some inconvenience and upset to both wildlife and human visitors the contractors did everything they could to minimise this and most activities went ahead without problem. Some landscaping and planting remains to be done in the spring but we should be in a position to take visitors to see the fish pass in the fairly near future.

A temporary road had to be laid across Tim's Field to give heavy equipment access to the site and it was decided to put the surplus soil on the field to the east of the path to the Manager's Garden. This meant that there was regular traffic past the Visitor Centre and there was a fear that we might have to close the reserve on Wednesdays and cancel some school visits. However, with the co-operation of the contractors and good management the reserve remained open throughout and school visits went ahead.

In autumn 2011 we embarked on an ambitious project to remove 1,200 square metres of willow from the coppice and replace this with a mixture of other tree species to improve the biodiversity of the area. Thanks to reasonable weather conditions in the latter part of the winter and a lot of hard graft we were able to complete the planting of around 600 young trees by the end of March before the main arrival of the many warblers that breed in the coppice. If nothing else, the very wet summer gave the trees a good start and saved our volunteers a huge amount of watering.

We seemed to break some weather record nearly every month and the weather certainly must have affected the breeding success of many species and was almost certainly the reason for a very poor berry crop in the autumn. However, there were still a number of notable successes with linnet, water rail, little owl and swallow all breeding for the first time and successfully raising young. A pair of

treecreepers also nested for the first time to our knowledge but whether this was successful we cannot be sure.

Gadwall had an excellent year with three pairs raising 18 young and record counts in October and November. Linnets too were present in record numbers in the early part of the year, thanks to a bumper crop of Fodder Radish seed on Tim's Field. A flock photographed over Tim's Field on 10th February was found to contain an astonishing 597 birds.

A Honey buzzard, photographed over the Dragonfly Ponds on 13th June, was a new and exciting bird for the reserve, Tree pipit was recorded for only the second time and common redstart for the third time. A juvenile cuckoo that spent a week on the reserve in July and provided excellent views for many visitors was only the third ever record for the reserve. It was the best year yet for the number of sightings of common buzzard and red kite, there were record counts of goldeneye and common tern, oystercatcher and lapwing all enjoyed some breeding success.

However, on the down side tufted duck failed to raise any young due to predation by mink, the resident kestrels failed to breed for the first time in five years, probably due to weather conditions, and our willow tits suddenly disappeared in March.

Despite the generally awful weather we were really quite lucky with our outdoor events. We were delighted that the British Dragonfly Society chose to launch National Dragonfly Week at Rodley this year and it was decided to run this event in conjunction with our annual Springwatch event on Saturday 9th June. The weather wasn't perfect by any means but it could have been a lot worse. The two Bat Nights on 21st July and 11th August enjoyed very pleasant weather and, as usual, were well supported both by the visitors and the bats. Small mammal surveys and bird walks also proved popular.

Our main fundraising event each year is the Summer Fair. This was held on Saturday 18th August and enjoyed one of the rare pleasant, dry days in August. This event is always well supported by the public and this year was no exception.

On Saturday 6th October we again had a stand at the Science Fair in Leeds City Museum and the following day we had a stand at TCVs Big Green Weekend event at Hollybush Conservation Centre.

Our Pie and Pea Day on 27th October was another successful event and on the same day volunteers from the reserve and Yorkshire Mammal Group carried out a detailed survey of the Scrubland, Reedbed and Duck Marsh for evidence of harvest mouse. Whilst none was found this means we can now go ahead with an introduction programme next year.

Things weren't looking promising for the Fungus Foray on Sunday 4th November with vegetation very long and lush after the very wet weather and fungi hard to find. However, a switch to the Willow Coppice proved the answer and more than thirty adults plus children were able to seek out a good range of species. At the end of the day it turned out to be one of our most successful forays to date in terms of species found.

Our education programme goes from strength to strength and this year we entertained 21 primary school classes and 8 uniformed organisations. Without the dedication and hard work of our volunteers these visits would not be possible. The school room extension to the Visitor Centre has really proved its worth this year and has meant that schools can still visit when outdoor activities become impossible due to the weather. Our education programme has also benefited this year from a generous donation from Aireborough Rotary Club which has enabled us to purchase a drop-down screen and digital projector for the school room. The donation of two new microscopes from Leeds Microscopical Society was also very much appreciated.

The Friends of Rodley Nature Reserve continue to organise fund raising events such as the Summer Fair and Pie and Pea day as well as managing the manning of the Visitor Centre and, of course, dealing with the many visits from schools and uniformed organisations.

On a sad note, we had to report the death of two of our long-standing volunteers this year, Sylvia Walker and Eddie Ramsden. Both were great supporters of the reserve and will be sadly missed.

Managing the habitat and improving the facilities for visitors is a major task for our band of outdoor volunteers who work in all weathers (particularly so this year). To avoid disturbance to visitors volunteering days again took place on Mondays and Fridays. In March work was carried out to refurbish the steps and viewing screen overlooking the Wet Grassland and in the same month 80 metres of hedge laying was completed on the John Ackroyd Meadow. In the summer months it was the usual balsam "bashing" and ragwort removal from the meadows and in the autumn work started on laying 120 metres of the Mike Fisk Meadow hedgerow by the roadside. In November the contractors working on the fish pass lifted the Reedbed Hide onto a higher base for us. This will give much improved views over both the Reedbed and Wet Grassland. Our volunteers constructed a hard path up to the hide with timber screening to avoid disturbance to the birds and new sections of dead hedging have been built. The approach to this hide has been very wet and slippery in recent winters and the new path will be a huge improvement, particularly for less mobile visitors. We have also taken the opportunity to cut windows at the far end of the hide giving visitors views onto the fish pass, weir and newly erected Swift nesting tower which incorporates sixteen nest boxes.

Volunteers from TCV, Leeds RSPB Local Group, BEES and Leeds City College also came to do valuable habitat management work on the reserve again this year. We are also indebted to Natural England for the help, support and valuable funding we receive from them through the Higher Level Stewardship Scheme.

Thanks to Yorkshire Water plc who own the land, the dedication of our volunteers, the generosity of our visitors and the support of Natural England we have been able to create something very special at Rodley, not just for wildlife but for people too. Long may it continue.

Editor

Rodley Nature Reserve - Monthly Roundup for 2012

January

There was a very wet and wild start to the year with a lot of rain and strong to gale force winds reaching 75mph at Leeds/Bradford Airport on the night of 4th. The river had been running very high for a while and it finally burst its banks above the bridge on 5th, flooding a considerable area of the farmland behind the car park. The strong winds died down on 12th and, with high pressure dominating, temperatures plummeted. The hardy souls who endured the Wetland Bird Survey for the BTO on 15th set off at 8.15am with the temperature showing minus 5°C and it was still only minus 2°C at 10.15am when the survey was completed. Most of the wetlands were frozen over for several days but a small area of the Lagoon remained ice-free, attracting good numbers of wildfowl.

Water rails were reported in the Reedbed, on the Lagoon and on the Wet Grassland in the first half of the month but, while a number of birds were obviously present, they were more often heard than seen. Shelducks are infrequent visitors here so four on the Lagoon briefly on 11th was a good record. Gadwall were again much more numerous than mallard and teal relocated to the river with their favourite haunts on the Duck Marsh and Wet Grassland frozen over. Shovelers were seen daily with up to seven reported. Wigeon often tend to vacate the reserve in the new year but birds were present daily with up to 23 counted. Kingfishers were seen on four dates before the wetlands froze over.

Mistle thrushes had been singing for a while before Christmas but the first song thrush was singing on the entry road on 9th. Not a sign of spring but, nevertheless, nice to hear.

Linnets were again a feature with large numbers visiting the crop field daily. 184 were counted in one small tree at the edge of the field on 15th. A male sparrowhawk was quick to see the opportunity and could often be seen going under the thick growth of fodder radish to flush out linnets. Sparrowhawks generally were very active with daily sightings all round the reserve.

One visitor had an interesting photographic opportunity on the willow path on 15th. Having patiently watched a weasel trying to find prey in the dead hedge at the side of the path for 45 minutes in freezing conditions, the animal finally emerged in front of him on the path with a large frog in its mouth.

Otters are often active here from November through to February and fresh tracks were found at the side of the river bridge in soft mud on 9th. Unfortunately, the theft of a night camera from the edge of the weir a week earlier rather put the damper on things and we were reluctant to risk putting another camera out.

Much milder weather arrived on 18th with temperatures up to 11°C on that date and the wetlands were almost ice-free by 20th. Unfortunately, this also heralded the return of greyer, windier and wetter conditions. Temperatures dipped sharply again towards the end of the month and the lagoon was partly frozen over on 29th. Goosander numbers on the lagoon at dusk are usually at their highest in January but this winter had been generally a bit disappointing with 18 at 4.30pm on 18th the highest count of the winter to date. We would hope to see twice this number in January.

Other sightings this month included a red kite over the Scrubland on 2nd, a goldcrest on 7th and 18th, 44 lapwings over the Lagoon on 9th, around 12 mistle thrushes on the John Ackroyd Meadow on 11th, a common buzzard over the meadows on 14th, a little owl on the farmland on 15th and a grey wagtail there on 16th. Siskins visited roadside trees on several dates to feed on alder seed. Up to 12 birds were reported. A curlew flying over the Lagoon on 29th was a good early record.

Volunteers were mainly engaged in continuing clearing a large area of the Willow Coppice for replanting with a mixture of native tree species but work also continued on laying a section of hedgerow near the Dragonfly Ponds. The islands on the Lagoon were strimmed in readiness for the returning oystercatchers and lapwings.

February

There was a very cold start to the month with daytime temperatures struggling to reach 2°C and falling as low as minus 5°C at night. Several hours of snow on 4th left us with a covering of several inches. Apart from an area on the Lagoon, the wetlands were frozen over. It got even colder over the following few days with daytime temperatures barely exceeding zero and down to minus 9°C at night.

However, the conditions provided some good bird watching with water birds seeking what small area of water remained open and linnets flooding onto the crop field daily. A dunlin on the Duck Marsh on 1st was the first since May 2006 and it provided a good deal of debate among birdwatchers in the Willow Path hide as to what it really was. Waders in winter plumage can be a bit of a problem, particularly when there are no other waders to compare size. Seventeen goosanders were on the Lagoon at dusk on the same date. Forty-nine fieldfares flew over the Lagoon at the same time.

A female goldeneye was seen on the river from the bridge on 4th and a male and two females were on the Lagoon the next day. Six shovelers were on the Lagoon on 6th and a handful of teal were there most days with their favoured feeding areas on the Duck Marsh and Wet Grassland frozen over. Gadwall resorted to the farmland with much of the Lagoon frozen over and up to forty were counted. But wigeon had had enough and apart from four birds on the Lagoon on 4th there were no other sightings. Water rails were seen briefly at the Kingfisher Pool on 8th and at the edge of the Lagoon on 10th.

A Little owl spent some time on the dry stone wall on the farmland on 6th in beautiful sunny, albeit snowy conditions. On the crop field linnets merged together to form a cloud of birds some days with more than 400 estimated. It can be difficult to assess numbers with so many small birds, so the answer is to take a digital photo of the flock and count them accurately afterwards. A photograph taken on 10th February revealed an amazing 597 - the highest number ever seen here. The fodder radish seed crop has provided a bountiful food source for the birds and kept them on site all winter. Wood pigeons also latched onto the crop and more than 300 were present daily.

The icy weather finally released its grip on the weekend of 11th/12th and it proved an excellent weekend for the birdwatchers. A male pintail on the Lagoon on 11th was only the second ever record for the reserve and a group of 14 goldeneyes that flew onto the Lagoon the same day was by far the highest ever count. Unfortunately, both pintail and goldeneyes had gone by the next day. One lucky photographer had excellent views of a water rail on the Reedbed and on the Duck Marsh on 12th and many visitors had good views of roedeer and a very obliging fox in the Willow Coppice. A total of 42 pheasants that flew off the crop field early in the day was an exceptional count for Rodley. Sunday 12th also produced a meadow pipit in the Sensory Garden of all places and the first oystercatcher of the year arrived on the middle island on the Lagoon - exactly the same date as last year. A dusk count on the Lagoon the same day produced a total of 29 goosanders - the highest count of the winter by far and the joint second highest ever February count.

The high pressure from the east that brought the cold conditions was replaced by high pressure from the west with much milder air, albeit from the north west and breezy. It remained quite mild to the end of the month, warm air from the sub-tropics bringing some exceptionally mild conditions on 28th.

Other sightings this month included a common buzzard on three dates, a red kite also on three dates, two siskins in roadside trees on 12th, two skylarks over Tim's Field on 16th, three pink-footed geese over the Duck Marsh on 24th, a great crested grebe on the Lagoon on 25th, one treecreeper by the bridge on 25th and two in the car park on 29th. Bullfinches, willow tits and reed buntings were daily visitors to the feeders in the Sensory Garden and the feeders in the Manager's Garden were permanently busy. A second oystercatcher arrived on the Lagoon on 18th and up to 13 lapwings were reported.

Work continued despite the bitterly cold conditions in the early part of the month and the storage heaters in the centre were very welcome for the volunteers' tea and lunch breaks. The clearing of the coppice area was largely done by the second week in the month and the first batch of new young trees was planted. Work also continued on laying the hedge near the Dragonfly Ponds.

March

The first part of the month was unsettled with rain at times, some fresh to strong westerly winds but with some good sunny periods. High pressure took charge from 10th bringing much calmer and drier conditions with some beautiful sunny days. Apart from a brief blip high pressure continued to dominate for much of the month. Inevitably this produced some greyer days and a few foggy mornings but there was also plenty of sunshine to bring out the first over-wintering butterflies.

It was a fairly quiet time on the wetlands with many of the winter visitors leaving and the first summer visitors awaited. The five juvenile mute swans on the Lagoon refused to leave home, despite some fairly aggressive encouragement from the adults and a sixth juvenile joined the group from somewhere on 23rd. A second pair of mute swans on the Wet Grassland started nest building on 18th.

A single oystercatcher was seen on the Lagoon or Duck Marsh during the first three weeks of the month and it was joined by a second bird on 21st. Mating was observed on one of the islands on the Lagoon on 23rd. Twenty-eight lapwings flew over on 2nd and a few birds were present most days on the wetlands. Among the last of the winter visitors to leave, up to eight goldeneye could be seen on the Lagoon most days but there were no sightings after 18th. Teal numbers started to fall away but a few were on the Duck Marsh most days and 15 were reported on 20th. Single snipe were seen on the Duck Marsh from the Willow Path Hide most days but 18 were accidentally flushed on 16th together with a jack snipe. A jack snipe was also flushed on 8th.

Two great crested grebes were on the Lagoon on 6th and 7th with just a single bird seen over the next two weeks. However, two were observed displaying on 23rd - hopefully an encouraging sign.

Perhaps the best sighting of the month was the group of seven whooper swans that arrived on the Lagoon on 23rd. The birds were still present on 25th when they were joined by two further birds. Shortly afterwards the same day all nine flew off. March is the best month for seeing these birds that have spent the winter in the south

east and are on their way back to their breeding grounds in Iceland. However, sightings are far from guaranteed.

Away from the wetlands, Tim's Field continued to bring in flocks of linnets, albeit in rather lower numbers than before. Nevertheless, flocks of around 50 birds and occasionally up to 100 were seen daily feeding on the fodder radish seed crop. Wood pigeons and pheasants also visited daily with up to 400 of the former and 29 of the latter.

Winter thrushes were hard to find. Around 70 fieldfares were on the farmland on 9th, 17 were seen near the bridge on 17th and 16 were in trees by the entry road on 22nd. Redwings had been surprisingly scarce this year with three on 17th only the second record of the year.

As the winter visitors disappeared the first summer visitors arrived - a chiffchaff in the Willow Coppice on 18th was the first. One was also heard singing on the Sludge Lagoon on 23rd and by the end of the month at least three birds were singing on the reserve. The first sand martin of the year was over the Lagoon on 28th and a pair of blackcaps was reported at the edge of Tim's Field on 29th.

Amphibians were also active this month. Frog spawn was found at the Dragonfly Ponds on 3rd - quite an early date for us. Toads were out in numbers at the ponds from 15th and the first spawn was found on 22nd.

Other sightings this month included a skylark over Tim's Field on 1st (a rare event these days), two coal tits near the bridge on 3rd (also scarce on the reserve), two common buzzards on 7th and one on 23rd, a curlew on the farmland on 11th, two red kites on 14th and a water rail on 14th and 17th. Two kingfishers seen on the river from the bridge on 11th were the first for almost two months. Treecreepers were recorded on three dates. On 22nd two were observed nest building in a crack in the stone wall at the side of the bridge. A male mandarin duck on the Duck Marsh on 26th only stayed for one day. A white stork flew over in a westerly direction on 31st and 30 rooks on Tim's Field the same date were surprise visitors. An immature mute

swan that crash-landed on the road on 28th was escorted onto the Lagoon where it seemed little worse for its experience.

Volunteers breathed a sigh of relief as tree planting in the coppice was finally completed this month. However, a lengthy spell of dry weather resulted in a lot of watering having to be done on a regular basis. A large water tank was installed in the coppice for this purpose.

April

What a contrast to last April. In April 2011 we recorded 1.5mm of rainfall. This April we recorded 160mm. It was in fact the wettest April since records began.. The month was unsettled throughout with very few rain-free days and a positive deluge in the last week of the month. The river was running very high and coloured but at least it saved the volunteers from having to continually water the newly planted trees in the Willow Coppice. Strong, bitterly cold north easterly winds brought a good covering of snow on 4th but mainly on the valley sides, the reserve only getting a thin covering that soon disappeared and a beautiful sunny day on 5th brought out several small tortoiseshell butterflies. However, sunshine generally was in short supply.

April is the month where the summer visitors start to arrive in force. The first swallow of the year was over the Lagoon on 3rd and two sedge warblers on the Duck Marsh on the same date were the earliest ever by more than two weeks. However, it seems these birds were just moving through as there were no further reports of sedge warbler until 17th. The first house martin was over the Lagoon on 7th and the first willow warbler was singing in the coppice on 13th. Blackcaps provided very good views on the Willow Path this month and a chiffchaff sang at the top of the same tree on the Willow Path every day. The first common whitethroat was reported on 21st and a lesser whitethroat was singing in bushes at the end of the Butterfly Bank from 23rd. A grasshopper warbler was singing or "reeling" across the road from the Lagoon Hide on 26th and the first swift of the year flew over at the same time. On the same date a common sandpiper was seen at the edge of the Lagoon and there was a further sighting in the same area on 30th. Spring records of this

species have been declining over recent years so it was nice to get two in the space of a few days.

Numbers of both sedge warblers and common whitethroats were slow to build this year and it appears that cold weather, strong headwinds in Southern Europe and huge sandstorms over the Northern Sahara were to blame, holding up many migrants for a time.

However, perhaps the most eagerly awaited on the summer visitors are the common terns. Two "tern rafts" were launched on the Lagoon early in the month and the first tern duly arrived on 18th. It was joined by a second bird on 22nd and a third bird was present briefly on 23rd. Four birds were seen on 28th with three again on 29th but the additional birds didn't stay. The rafts are covered in broken sea shells or small pebbles, the birds making a shallow depression to lay their eggs.

On the wetlands the pair of great crested grebes was present throughout on the Lagoon and the birds were often seen displaying. The pair of oystercatchers alternated between the Duck Marsh and the Lagoon but finally appeared to have chosen a nesting site on the smaller island on the Lagoon. The first coot chicks (3) were seen on the Lagoon on 19th but one pair on the Wet Grassland on 27th had six chicks. The first mallard ducklings were found at the side of one of the Dragonfly Ponds on 17th but two of the three were dead and the survivor had to be taken into care. There was no trace of the adult female. Up to 20 gadwall and six teal were present throughout and hopes were high that a few might remain to breed.

We thought the last of the winter visitors had gone but a few fieldfares continued to hang on, 16 being reported near the river bridge on 14th, several now in their breeding plumage. Seven were seen in trees in the Manager's Garden on 18th.

Other sightings this month included a jack snipe flushed on the Duck Marsh on 3rd, a water rail on 5th and 7th, a common buzzard over Tim's Field on 6th, a curlew on the farmland on 7th and 8th, two collared doves on the entry road on 8th (the first record of the year), a red kite on 17th, a grey wagtail on four dates, a little owl on 22nd and a peregrine falcon over the Lagoon on the same date. Treecreepers

were reported on four dates near the nest site at the bridge. Kingfishers have been few and far between this year so one on the river on 9th was a welcome sighting. There were further sightings of a single bird on the Wet Grassland and the river on 22nd. Perhaps the most unusual visitor this month was the black swan that spent several days on the Lagoon from 24th, much to the surprise of the resident mute swans. A red-legged partridge on the entry road on 24th was also a bit of a surprise.

Tim's Field was ploughed and seeded on 10th - a winter seed crop for the birds on one half and a pollen and nectar mix on the other half for bumblebees and butterflies. One or two lapwings were soon displaying over the newly ploughed area and a small flock of linnets, now down to about 30 birds, continued to be seen on the field.

May

Chilly north easterly and north westerly winds were a feature in the first three weeks of the month, often accompanied by grey skies and rain. There was a dramatic improvement from 20th with clear skies and high temperatures up to 27°C bringing out butterflies in good numbers, Orange tips being particularly numerous this year. The Dragonfly Ponds also came to life with hundreds of azure damselflies emerging.

Despite the weather, the reeling song of a grasshopper warbler could be heard in long vegetation at the edge of the Scrubland in the early part of the month, usually close to the beehives. It was easy to hear but, typically, very hard to see. Other warblers were more accommodating with blackcaps seen most days on the Willow Path and others singing all round the reserve. They seemed to be present in particularly good numbers this year. Garden warblers are never as numerous as blackcaps here but one was singing in a thick patch of bramble at the edge of the Lagoon on 8th and two were singing in the Willow Coppice later in the month. The scratchy song of the common whitethroat could be heard all round the reserve, wherever there were patches of brambles. The first reed warblers were reported in the Reedbed on 4th and sedge warblers were singing on all the wetland areas.

Some summer visitors like the whinchat are becoming increasingly hard to find these days but most springs usually turn up one individual and this year was no exception. One was seen well on the Scrubland on 8th and 9th, its habit of perching on top of the vegetation making it easy to pick out.

The pair of mute swans on the Wet Grassland showed off their six tiny cygnets for the first time on 6th. The long standing pair on the Duck Marsh went two better with eight cygnets making their first appearance on 10th. However, by 25th the Wet Grassland pair had lost three and the Duck Marsh pair had lost one.

The pair of common terns settled down on their raft on the Lagoon but with up to four additional terns making regular visits they were often on the wing driving the competition away. Whilst these birds often nest communally the supply of fish on a small inland site is more limited and defending a food source then becomes a priority. Towards the end of the month a second pair took up residence on the middle island on the Lagoon and an uneasy peace followed. The female on the raft appeared to be sitting on eggs in the last week of the month. An Arctic tern paid a brief visit 19th.

The two great crested grebes on the Lagoon were often elusive and there were no sightings at all for 10 days. However, they finally settled down and appeared to have chosen a nest site in thick vegetation at the side of the Lagoon. Greylag geese don't usually nest here but one pair laid six eggs in a nest on one of the islands and six goslings made their first appearance on 27th.

Song thrushes seemed particularly numerous this year with up to seven singing on the reserve this month. Other species present in higher than usual numbers were swallows and swifts. Wind and rain often brought them low over the wetlands and there was an estimate of more than 70 swallows over the Lagoon on 15th. Swifts were present in even higher numbers on 16th.

Great spotted woodpeckers had been elusive this year and one on the Willow Path on 19th was the first record for more than three months. Two were seen by the Lagoon on 20th and 30th. Kingfishers too had been hard to find but there were several sightings from 19th.

Work on the fish pass at the weir started this month and a temporary road was laid across the six acre crop field to get the heavy digging equipment down to the site. Lapwings nested on the crop field last year and they were undeterred this year, four chicks being seen by many visitors from 26th.

The local farmer cut his fields in the last week of the month. Apart from bringing in good numbers of starlings this has also proved an attraction for red kites over the last year or so. Two were seen over the reserve on 24th and one on 25th.

Other sightings this month included a curlew on 2nd, a whimbrel over the Lagoon on the same date, a grey partridge behind the Reedbed also on 2nd, a tree creeper on 4th, a black swan on the Lagoon on 11th, grey wagtails on three dates, a pair of shovelers on the Lagoon on 26th and a little owl on the same date. Up to three tree sparrows were present throughout the month and one bird was observed collecting nesting material. A female wheatear at the edge of Tim's Field on 19th was the first record of this species since 15th September 2007. In the Manager's Garden Hide the juvenile wrens in the swallow nest fledged on 26th. Earlier in the week one juvenile fell out of the nest and had to be pushed back in

Daytime sightings of otters on the reserve have always been suspect but there was a positive sighting of one on the Lagoon on 30th.

June

According to the Met Office, averaged across the UK, June 2012 was the wettest since records began in 1910, the coolest since 1991 and the second dullest since records began (The record for the lowest sunshine is still June 1987). June in Yorkshire turned out to be one of the wettest on record - in fact second only to the incredibly wet June of 2007. Weather for the Dragonfly Day/Springwatch event on 9th could have been better but it could have been a lot worse and visitors came in good numbers to enjoy a variety of activities. However, work on the fish pass came to a grinding halt in the last week of the month with the whole area flooded as the river ran bank

high. The farmland behind the car park was also under water for a time.

Breeding birds must have been hit hard by the weather but a single common tern chick made its first appearance on the raft on the Lagoon on 4th and, whilst the female continued to sit for another day or so, no further chicks appeared. The adults fiercely defended their territory and even the mute swan family came in for an aerial bombardment at times. Up to seven adult terns were seen over the following weeks and a second pair settled down on the middle island but if eggs were laid they were almost certainly predated.

Coot, moorhen and mallard families were seen daily and gadwall bred for the second year running with a female and four ducklings on the Wet Grassland and a female with three ducklings on the Duck Marsh - both first seen on 7th. The following day possibly one of the same birds was seen on the Duck Marsh with six ducklings. The first little grebe chicks (5) were seen on the Wet Grassland on 20th and a second family of four chicks was seen on the Duck Marsh from 27th. However, the great crested grebes again disappointed when their nest on the Lagoon was abandoned, the birds being last seen on 17th.

The pair of mute swans on the Wet Grassland again failed. Just two of the original six cygnets were seen this month but by 21st none could be found. The weather may well have been a contributory factor. However, the Duck Marsh pair still had their remaining seven cygnets at the end of the month. Kingfishers were seen almost daily on the wetlands with two on occasions, high water levels on the river probably having helped. Two oystercatcher chicks made their first appearance on the middle island on the Lagoon on 9th. On 11th they turned up at the edge of the Lagoon and then on the Duck Marsh on 16th. However, only one chick was seen from 20th.

It was an excellent month for sightings of little owl with a bird reported on eight dates and two on one date. Nearly all sightings were on the railings at the edge of the Sludge Lagoon, birds being attracted here by the supply of invertebrates in the earth piles left by the contractors.

In the early part of the month a female reed bunting was observed taking food to a nest low down in vegetation at the edge of one of the Dragonfly Ponds. Bullfinches were again much in evidence with daily sightings. Four males and a female in the Manager's Garden on 9th and three males and three juveniles there on 17th were perhaps the best records.

A few juvenile warblers started to appear with a young blackcap reported on 17th and the first family of common whitethroats in the John Ackroyd Meadow hedge on 30th. Grasshopper warblers were typically elusive with a bird reeling on just two dates in long vegetation at the Dragonfly Ponds. Sedge and reed warblers in the Reedbed seemed undeterred by work at the fish pass just a few yards away and birds continued to sing there throughout the month. Towards the end of the month a pair of swallows was nest building in the dumper truck shed.

Among other sightings this month were a skylark singing over the farmland on 1st and over the coppice on 7th, a female roedeer and fawn on the Duck Marsh on 6th, a pair of shovelers on the Duck Marsh on 17th, a tawny owl on the far side of the Lagoon on 20th and 26th, a common sandpiper on the Lagoon on 28th, a grey wagtail in the compound on 29th, a red kite on three dates and a curlew over the farmland on two dates. However, perhaps the most interesting sighting of the month was that of a honey buzzard high over the Dragonfly Ponds on 13th. A written description and photographs were sent to Yorkshire Naturalists Union for acceptance. There were further reliable sightings of an otter on the Lagoon this month on 7th and 13th, the terns betraying its presence as they hovered over it calling as it swam down the Lagoon.

Despite the adverse weather volunteers pressed on, this month devoting their efforts to ragwort removal from the meadows and the inevitable Himalayan balsam bashing.

July

The weather was again very unsettled for most of the month with a distinct lack of sunshine. A day of very heavy rain on 6th saw the river running bank high and again curtailing work on the fish pass. There

was serious flooding in parts of the county and the Great Yorkshire Show had to be cancelled for the first time in its 154 history because of the weather. Tuesday 24th was the hottest day of the year to date with temperatures reaching 26°C locally but again with a lot of cloud. Little owls were again much in evidence with daily sightings throughout the month at the edge of the Sludge Lagoon. In the early part of the month sightings involved just one bird but on 11th three were seen on the fence, one carrying a small rodent. On 16th four birds were reported, three of which were clearly juveniles and on 19th an adult was observed passing food to a juvenile. This is the first time this species has bred on the reserve but there were other breeding firsts too. Two water rails were seen on the Duck Marsh with five tiny chicks on 4th and a pair of swallows was feeding four young at a nest in the dumper truck shed from 23rd.

On the wetlands a third pair of gadwall nested and showed off nine ducklings for the first time on 5th, eight of which survived to the end of the month. The juvenile common tern was seen most days with up to four adults present but the birds spent less and less time on the Lagoon as the days passed and three adults and the juvenile were last seen on 24th. Juvenile little grebes were seen most days on the Wet Grassland and Duck Marsh and from 27th an adult was sitting on a nest on a thick bank of algae on the Lagoon opposite the Mike Sheldon Hide. At least one pair of tufted ducks was thought to be nesting on the middle island on the lagoon but on 4th a North American mink was observed making seven visits to the island, on each occasion returning with an egg to the bottom island. Kingfishers were seen regularly with two birds some days.

Bird song started to die away as the month progressed but one or two blackcaps were still singing spasmodically as late as 22nd and a song thrush sang daily in the Willow Coppice to the end of the month. Juvenile warblers were reported most days with common whitethroats appearing to have had another good breeding season despite indifferent weather. A family of sedge warblers at the edge of the Lagoon on 14th included four juveniles. Juvenile willow warblers and chiffchaffs were often elusive but their contact calls could be heard all round the reserve.

Despite a distinct lack of sunshine most days butterflies were seen in reasonable numbers with 100+ counts of small whites and green-veined whites on Tim's Field with ringlets and meadow browns on the wild flower meadows. A hatch of commas in the latter part of the month provided some colour. Dragonflies were disappointing in the main but brown hawkers and banded demoiselles were as reliable as ever and were seen in good numbers.

Other sightings this month included a hobby just off the reserve on 7th (only the second record), a common sandpiper on the Lagoon on the same date, five juvenile goosanders on the river on 21st, a little egret low over the scrub on 23rd, a common buzzard on two dates, a red kite on five dates and a barn owl over the farmland at 9.00pm on 31st. Goldfinches appeared to have had a good breeding season with flocks of up to 60 birds on the Butterfly Bank and John Ackroyd Meadow in the last few days of the month. Perhaps the bird of the month, however, was the juvenile cuckoo that provided good views at the Dragonfly Ponds from 19th to 25th. This was only the third record for the reserve and a very obliging bird for the photographers.

With the wild flower meadows due to be cut at any time work continued on removing the last remnants of ragwort from them. Himalayan balsam removal, however, was a major task for the volunteers this month.

August

Summer 2012 (ie. June, July and August for statistical purposes) turned out to be the second wettest on record across England and the UK as a whole. It was also the dullest since 1980. Locally, the bulk of August rainfall fell from 15th onwards with 25mm in the course of just a couple of hours on that day. Fortunately, the Summer Fair, held on Saturday 18th, enjoyed one of the rare pleasant, dry days.

August is usually one of the quietest months in the bird watchers' calendar with many species completing nesting and undergoing their post breeding moult. However, mixed feeding parties tend to gather at this time of year and when one is encountered it can provide a brief spell of hectic activity. The best places to encounter mixed feeding parties were on the Willow Path, along the Mike Fisk Meadow

hedgerow and on the Butterfly Bank. Parties included long-tailed tits, bluetits, great tits, willow warblers and chiffchaffs.

Linnets have been very much autumn and winter visitors most years but it had been suspected that one or two pairs had stayed to breed this year and this was confirmed when a juvenile was seen by the Dipping Ponds on 2nd. A male and female were seen on overhead wires near the radio mast on 19th and a male and two noisy juveniles were seen on overhead wires by the Visitor Centre on 31st. Tree sparrows had been conspicuous by their absence throughout July but on 3rd an adult was feeding two juveniles under the Sensory Garden feeders. Birds continued to visit throughout the month.

The young swallows in the dumper truck shed fledged in the early part of the month and swallow numbers generally were much higher than last year. Sixty seven were counted on wires by the radio mast on 10th but on the evening of 11th between 150 and 200 were over the farmland and Mike Fisk Meadow. On 29th 35 were lined up on wires by the Visitor Centre. Swallows were also reported chasing sparrowhawks on two occasions.

Despite the generally unsettled weather the second Bat Night on 11th enjoyed a pleasant evening and, in addition to the usual noctule and pipistrelle bats, both tawny owl and little owl were calling at 10.45pm. Little owls had another excellent month with regular sightings. On 12th many visitors were able to watch up to five owls on the Sludge Lagoon fence and in the bushes behind the fence through the reserve's telescope.

On the wetlands the first returning snipe was seen on the Duck Marsh on 4th and the first teal returned on 12th with three reported on the Wet Grassland. On 13th 18 teal were counted on the Duck Marsh and Wet Grassland. Kingfishers had another good month with sightings most days and three on the Lagoon on 8th. The water rail family, however, proved elusive with just a single sighting of an adult on the Wet Grassland on 11th. Another family of little grebes appeared on the Wet Grassland on 13th with four chicks and two small chicks made their first appearance at the nest on the algae on the Lagoon.

Sunshine was often in short supply but during the sunny spells butterflies and dragonflies responded in good numbers. Peacocks in particular were much more numerous than last year and a large emergence about 20th saw double figure counts on the buddleias. A count of 13 small coppers on 28th was almost certainly the highest ever on the reserve. Brown hawkers were seen in very good numbers and the first migrant hawkers appeared on 28th. Southern hawkers are never numerous but there were sightings on 11 dates.

Other sightings this month included a red kite on 4th and 6th and two on 15th, a female shoveler on the Lagoon on 16th and on the Duck Marsh on 29th, three goosander on the river on 24th and one on 31st and a wheatear over Mike Fisk Meadow on 31st.

On the habitat management front the two hay meadows were cut and baled on 15th which probably accounted for the arrival of the two red kites on the same date. These birds do tend to show up when meadows are being cut.

September

High pressure was firmly in charge from the beginning of the month and nine dry days with plenty of sunshine brought out butterflies in good numbers on the buddleias outside the Visitor Centre and on the Butterfly Bank. A wall brown on the river path on 5th was the first record of this declining butterfly since 2007. Temperatures reached 24°C on 8th and 9th. It all came to an end from 10th with much more unsettled conditions with rain, heavy at times, and feeling generally chilly as temperatures dipped into single figures at night. However, things went rapidly downhill in the last ten days of the month with the deepest area of low pressure since 1981 bringing almost 100mm of rain in the course of a couple of days and causing many of Yorkshire's rivers to burst their banks. The River Aire was no exception and the farmland behind the car park was extensively flooded.

With many birds on the move September can turn up some interesting species and this year was no exception. A common redstart on the Scrubland on 1st was only the third record and the first since 2006. Single wheatears were reported on Tim's Field on

4th, 5th and 19th with possibly three whinchats there on 5th and two on the Duck Marsh on 26th. A Tree pipit in trees by the Education Pond on 8th was only the second ever record for the reserve. Two stonechats were on Tim's Field on 19th.

A number of warblers usually hang on well into September but most had vacated the reserve by the end of August, possibly encouraged to do so by the very wet summer. This year there was just one report of a common whitethroat on the Scrubland on 2nd September. The remaining summer visitors departed this month with the last two swifts seen on 3rd September, sand martins on 18th, house martins on 23rd and the last swallows on 29th. More than 200 swallows and sand martins were over the Reedbed on the evening of 18th.

As the summer visitors departed the first winter visitors arrived in the form of two wigeon on the Lagoon on 16th. Birds were reported daily thereafter with up to six on occasions. Duck numbers generally started to build with up to six shovelers and 41 gadwall recorded. A female pintail on the Duck Marsh on 26th was only the third record for the reserve.

Other sightings this month included a common sandpiper on 1st, a common buzzard on five dates, red kites on four dates with four birds on 5th, around 100 lapwings over the farmland on 12th, a little egret on 22nd, a water rail on 23rd and 26th, a peregrine falcon on 29th and a grey wagtail at the Education Pond on 30th. Linnet numbers started to build in the latter part of the month with up to 20 reported on Tim's Field. There was plenty of activity at the feeders in the Sensory Garden and visitors were able to enjoy good views of up to 25 goldfinches some days including many juveniles.

On the work front, high river levels in the latter part of the month curtailed work on the fish pass for a time with completion still some way off.

October

It was a month of contrasts with some cold, frosty nights and beautiful sunny days but also wet and windy days and damp, calm foggy days. A spell of very pleasant weather from 18th to 21st was followed by

several days of grey, damp and often foggy weather. Clearer, colder air from the Arctic brought a short-lived cold snap from 26th and a bright but very cold day for the annual Pie and Peas Event on Saturday 27th. Less cold Atlantic air moved in again on 28th bringing cloud and rain at times for the remainder of the month.

The first winter thrushes started to appear this month, albeit in small numbers. Six redwings over the reserve on 13th were the first with more than 30 reported on the farmland on 28th. The first two fieldfares flew over on 27th and 12 were in the poplars near the Manager's Garden on 28th. A brambling was reported in the Manager's Garden on 20th but there were no other sightings.

Water levels on the back Duck Marsh, Reedbed and Wet Grassland were dropped early in the month prior to essential habitat management. A section of the Reedbed to the right of the hide was subsequently cut with the help of volunteers from TCV and at the end of the month vegetation on the back Duck Marsh and Wet Grassland was cut by tractor. With work on the fish pass still ongoing and low water levels there was little activity in the Reedbed and on the Wet Grassland but a kingfisher continued to delight visitors as it fished successfully in the Kingfisher Pool on several dates. A kingfisher was also seen at the Education Pond on 26th. Snipe were often hard to find but six were accidentally flushed on the Wet Grassland on 22nd.

The Lagoon and Duck Marsh were the places to be for numbers of birds throughout the month. The gadwall record fell several times with 86 on 15th, rising to 91 on 21st, 99 on 24th and 109 on 31st. By way of comparison, the best mallard count was just 48. Tufted duck numbers remained low with no more than five but wigeon numbers rose with 12 on 24th but 40 over the wetlands on 28th a new record count for this species. A male pochard on the Lagoon on 24th was the first of the autumn and up to five shovelers were seen. A male goosander on the Lagoon on 31st was also the first of the autumn.

In the Manager's Garden up to four reed buntings were seen daily with up to four tree sparrows some days. Coal tits are usually hard to find at Rodley but a bird was seen at the feeders on four dates between 20th and 31st with two on one occasion. Up to three

bullfinches were also reported. Goldfinches were daily visitors to the feeders in the Sensory Garden with up to 16 seen.

Among other sightings this month were a tawny owl on the Willow Path on 1st, three common buzzards over the reserve on 6th and one over the farmland on 20th, a curlew over the Willow Path on 10th, a siskin on 14th, a grey wagtail on 14th and 28th, a water rail on 27th and 31st, a red kite on 28th and a chiffchaff on three dates. Seventy pink-footed geese flew over on 7th and more than 300 starlings performed over the Lagoon at dusk on 28th.

Volunteers started work on laying a section of the Mike Fisk Meadow hedge this month and on 27th around 20 volunteers from RNR and the Yorkshire Mammal Group carried out an extensive search of the Scrubland and the back of the wetlands for signs of harvest mice - unfortunately without success.

November

November continued a remarkable run of wet weather, becoming the 8th successive month where rainfall had been above average, a sequence which began in April. However, it was very much a month of two halves. The first half brought a combination of some frosty nights, some windy days, a few very mild days and some pleasantly warm sunshine. In sharp contrast the second half of the month saw a deluge of rain with severe flooding in many parts of the country and more than 100mm of rain locally. A dry end to the month with some hard frosts left a layer of ice over the Wet Grassland, Reedbed and most of the Duck Marsh. By 30th two thirds of the Lagoon was also frozen over.

Work on the fish pass was finally completed, the site becoming a quagmire at times and volunteers battled on laying a long section of the Mike Fisk hedge despite the weather. The Reedbed Hide was also lifted while the contractors were still on site and placed on a raised bed of earth to give better views over the Reedbed. Water levels on the Wet Grassland, Reedbed and Duck Marsh were also restored this month following habitat management work.

On the wetlands gadwall numbers remained high with 104 on the Lagoon on 14th but tufted ducks virtually disappeared with just one sighting of a single bird on 28th. A few pochard were reported most days with up to five seen and a male goldeneye was a welcome visitor on 11th and 26th. There were more sightings of goosanders and 12 were on the Lagoon late in the day on 24th. Teal were regular visitors to the Lagoon and Duck Marsh with a best count of 22. Wigeon were seen daily with a best count of 23 on 1st but most days produced just a handful of birds. Up to four snipe were seen but actual numbers present were almost certainly much higher. Water rails were typically elusive but one was reported on the Wet Grassland on 10th and one was seen on the Duck Marsh on 20th.

With a fairly poor seed crop on Tim's Field this year linnet numbers were never going to reach the highs of last autumn but a flock of up to 60 birds was seen most days and 94 were counted on 18th. After recent autumns tree sparrows were disappointing with no more than two reported. Numbers of reed buntings visiting the feeders in the Manager's Garden and Sensory Garden were also disappointing with no more than four birds seen.

Among other sightings this month were a red kite on 7th and 18th with three on 11th, a common buzzard on 10th and 11th, a grey wagtail on 11th and 18th, two lesser redpolls in the Manager's Garden on 14th and four there on 20th, a peregrine falcon on 17th, 11 lapwings on 17th, three blackcaps on 18th and a woodcock on the same date. Sixty pink-footed geese flew over the farmland on 2nd.

Little owls were hard to find this month but one was seen in the Willow Coppice on 7th and one was calling from the Sludge Lagoon late in the evening on 14th. Teasel seed heads were the flavour of the month for goldfinches, 26 birds being counted on seed heads by the Dipping Pond on 20th. Mild conditions brought out a late pipistrelle bat at 5.00pm on 11th with two on the Willow Path at the same time on 14th.

December

The cold snap at the end of November continued into December with most of the wetlands frozen over and daytime temperatures struggling to exceed zero. There were some bit milder days with rain but the frosts soon returned and this was the picture for the first half of the month. Some heavy overnight rain on 6th brought the river up quickly, giving the completed fish pass its first real test as the water surged through. By 7th only the Wet Grassland remained icebound but the ice soon returned with freezing fog a feature and nighttime temperatures down to minus 5°C.

Freezing rain on 14th made roads and paths treacherous for a few hours but there was a major change to the weather in the second half of the month with grey skies and long spells of rain bringing flooding to many parts of the country. Locally two and a half inches of rain fell in the space of three days, leaving the river running very high and the fish pass a raging torrent.

Tufted duck numbers suddenly increased this month with an influx of birds, 26 on 15th being the highest count since February. However, gadwall numbers fell away somewhat after the record counts of last month but 30+ were still present some days. A count of 21 goosanders at dusk on 13th on a small ice-free area on the Lagoon was the best of the winter so far. Up to seven snipe were reported at the edge of the Lagoon but 13 were accidentally flushed there during a water rail survey on 17th. The survey itself produced three calling water rails in the Reedbed and one on the Wet Grassland. A water rail was also seen on the riverbank from the bridge on Christmas Eve. Up to 11 wigeon grazed on the grass between the Lagoon and Duck Marsh and a few pochard were present most days but teal numbers were disappointing with counts often in single figures and just one report of around 30 birds. In the few days prior to Christmas bird numbers on the wetlands dropped considerably with just a handful on the Lagoon some days. However, a female goldeneye on 29th and 30th was a bonus.

With plenty of waxwings in the Leeds area this month hopes were high that they might visit the reserve. This proved to be the case when 20 arrived to feed on rowan berries near the Manager's Garden

on 9th. Other winter visitors included the two thrushes but numbers were low with no more than 10 redwings and 22 fieldfares reported, a very poor berry crop this year clearly not helping matters.

Linnets were present throughout the month but there were no real signs of numbers building significantly with a best count of around 80 birds. On 19th a female sparrowhawk was reported chasing linnets across Tim's Field. There was more little owl activity this month but only at dusk with birds calling on the farmland and in the Willow Coppice and sightings on the Sludge Lagoon fence, the Willow Path and over the Yorkshire Water compound.

Other species reported this month included grey wagtails on six dates, red kite on four dates with two on one date, lesser redpoll on two dates and seven siskin in roadside trees on 24th. On 19th 42 lapwings flew over the Visitor Centre and seven grey herons were on the flooded farmland on 28th. Cormorants are seen daily but nine over the farmland on 16th was the highest count of the year. Roedeer were very active this month with many visitors enjoying views of up to five animals.

On the work front volunteers completed the laying of the long section of the Mike Fisk Meadow hedge, a new path was laid up to the Reedbed Hide, wooden screening was erected on the approach to the hide and new sections of dead hedging were built.

The year ended on a very soggy note with a day of heavy rain and the river running very high again.

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 but has not yet been proved to have bred on the reserve.
Resident Breeder	All or part of the local population is present throughout the year and breeds on the reserve.
Migrant Breeder	Breeds on the reserve but all or most of the breeding population departs in autumn or winter.
Casual Breeder	Has bred irregularly on the reserve and is likely to do so again.
Winter Visitor	All or part of the population breeds away from the reserve but either spends the winter here or has visited the reserve on at least 25 occasions in the winter months.
Migrant Visitor	A species which is found on the reserve in spring and/or summer but has not yet been proved to have bred on the reserve. Most or all depart in autumn and/or winter.
Passage Visitor	Has occurred on 25 or more occasions as a passage migrant in spring and/or winter.
Frequent Visitor	A species which visits the reserve throughout the year or a good part of the year but does not breed on the reserve.

Infrequent Visitor	Has occurred on more than 10 but fewer than 25 occasions as either a passage or a winter visitor.
Scarce Visitor	Has occurred on the reserve on only 10 occasions or less
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:

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

Last year's five juveniles finally dispersed in the last week of March leaving the adults to get down to the serious business of nesting again at the edge of the Duck Marsh. The Wet Grassland pair were still in residence after their failure to produce young last year. On 28th March a juvenile crash landed on the road by the coppice but, despite a bloody beak, it seemed non the worse for its experience and was safely shepherded onto the Lagoon (PM/GJB). On 6th May the Wet Grassland pair showed off six tiny cygnets for the first time and on 10th May the Duck Marsh pair went two better with eight cygnets. By 25th May the Wet Grassland birds had lost three cygnets after an ill-fated visit to the river and the Duck Marsh pair were down to seven cygnets two days later. By 21st June the Wet Grassland pair had lost all six. The remaining seven from the Duck Marsh thrived, spending most of their time on the Lagoon. At the beginning of October they took their first flights, one bird clipping overhead power lines but surviving the experience. Additional birds in the form of two adults and three younger juveniles spent several days on the farmland in October but the female was tragically killed by a dog while defending its young on 21st October. The adult male and one juvenile subsequently disappeared and the surviving juvenile was last seen on the farmland on 25th December. Up to ten birds were reported on the canal near the reserve entrance in October (DC/EC).

Whooper Swan *Cygnus cygnus* Scarce Visitor

This species has now been recorded in each of the last six years. March is becoming the best month with birds returning to breeding grounds in Iceland dropping in for a rest. This year seven birds arrived on the Lagoon on 23rd March (PM/BM) and were present until 25th March when they were joined by two further birds (DC/EC). All nine birds departed later than same day.

Pink-footed Goose *Anser brachyrhynchus* Passage Visitor

There were three records this year. Three flew over the Duck Marsh on 24th February (JB/MB); c70 flew over the reserve in a westerly direction on 7th October (JC/JHAC) and c60 flew over the farmland on 2nd November (JB/MB).

Greylag Goose *Anser anser* Casual Breeder

Like last year, there were no sightings at all in January. Up to three birds were seen on the river and farmland in February and a few could be found on the Lagoon throughout March with a best count of nine on 26th (JB/MB). On 30th April a nest with six eggs was found on the middle island on the Lagoon and on 27th May six goslings made their first appearance (JB/MB). A count of 18 birds on 15th May was the highest of the year at the time (PM/BM et al). Only four of the six juveniles were seen from 10th June and they were last seen on the river on 11th July. Sightings were few and far between after this date but 14 were on the farmland on 14th August. There were no sightings in September. Nine flew over the farmland on 21st October (JB/MB et al) and a single bird was on the Lagoon on 27th October but there were no other sightings until 12th December when a bird was again on the Lagoon. From 15th to 21st December 22 birds were seen on the farmland daily (JB et al) and this proved to be the highest count of the year. A single bird high over the Scrubland on 25th December was the last sighting of the year. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
-	3	9	6	18	2	2	14	-	9	-	22

Canada Goose *Branta canadensis* Resident Breeder

Numbers on the wetlands during the day in the early part of the year were generally in single figures with more coming onto the Lagoon at dusk. Forty-eight that flew in towards dusk on 12th February turned out to be the highest count of the year (JB/MB et al). Four birds were recorded on nests on the Lagoon on 16th April and two goslings from one nest made their first appearance on 30th April. On 8th May a bird was also reported on a nest on the raft on the back Reedbed. Three families of one, two and three goslings were on the Lagoon in the last week of May and three goslings were seen on the nest on the raft on the back Reedbed on 4th June. Numbers tailed off from the second week in June with just a couple of birds on the Lagoon most days. A count of 17 on the river late in the evening on 11th July included several fully grown juveniles but numbers were otherwise low throughout July. Twenty-six were on the Lagoon on 8th August and up to 36 were seen on the farmland some days in August. Like last

year, September was the quietest month of the year with just a single bird on the Lagoon most days from 15th. Numbers started to build in October with up to 30 reported on the Lagoon but November was surprisingly quiet with no more than nine on the wetlands during the day. However, 35 were on the canal by the reserve gates on 7th November and it seems that birds were coming onto the Lagoon later in the evening. This was certainly the case in December with c45 birds coming in at dusk on 2nd (PM/JB). Thirty-three were also counted there at dusk on 16th (PM). Monthly maxima are shown below (adults only).

J	F	M	A	M	J	J	A	S	O	N	D
33	48	22	25	28	29	17	36	2	30	9	c45

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

There were 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 record for the reserve. It would be nice to think this was a genuine winter visitor but it was much more likely an escaped bird.

Common Shelduck *Tadorna tadorna* **Passage Visitor**

Each year seems to produce just one or two sightings and this year was no exception. Four were reported on the Lagoon on 11th January (DC/EC).

Mandarin *Aix galericulata* **Scarce Visitor/Possible Escape**

A male was on the Duck Marsh on 26th March (PM/BM). This species has been recorded on just two occasions previously - on 4th and 19th April 2009 - in each case a single male on the river.

Wigeon *Anas penelope* **Winter Visitor**

Despite much of the Lagoon being frozen over for a time birds were present daily throughout January. There were a number of double figure counts with 23 on 29th (DC/EC) the highest since October 2005 and the second highest ever. Numbers fell away from the beginning of February and two birds on the Duck Marsh on 26th February were the last of the winter. The first six birds of the autumn arrived on 16th September (WeBS), 10 days earlier than last year.

Numbers reached double figures on 24th October with 12 birds but a group of 40 over the Lagoon on 28th October was the highest ever recorded (LJ). Unfortunately, these birds did not stay. However, there was a good count of 23 on 1st November (PM/BM). Numbers fluctuated daily but 12 were still on the Lagoon on 30th November with two-thirds of it covered in ice. Up to 11 grazed on the grass between the Lagoon and the Duck Marsh in the early part of December with most of the wetlands frozen over and there was a count of 13 on 2nd (DC/EC). Numbers fell away with the arrival of milder conditions before Christmas and no more than four were present at the end of the year. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
23	4	-	-	-	-	-	-	6	40	23	13

Gadwall *Anas strepera* **Casual Breeder**

Last year produced record numbers of birds and a pair bred on the reserve for the first time. This year was even better with the record smashed several times and three pairs breeding successfully. The year started well with January numbers the highest ever and a best count for the month of 51 on 1st (PM/BM). With most of the wetlands frozen over in the first part of February birds resorted to the farmland and river. There was a count of 43 on the farmland on 11th February (JB/MB) and 39 were on the river on 12th February during an early morning WeBS survey. Numbers started to fall away from the middle of February but with a number of birds still present into May hopes were high for at least one pair to nest. The first three ducklings were seen on the Duck Marsh on 7th June and on the same date a female was seen with at least four ducklings on the Wet Grassland (PM/BM). The following day a pair with six ducklings on the Duck Marsh were probably the Wet Grassland birds. On 5th July a female was seen with nine tiny ducklings on the Duck Marsh (PM/BM), eight of which survived to adulthood. Numbers started to build again in September and a count of 72 late in the day on 10th October (PM/BM) equalled the previous highest count for the reserve. On 15th October 86 birds were counted on the Lagoon and on 21st October 91 were reported, 64 of which were on the Duck Marsh (PM/BM). Numbers continued to rise with 99 on 24th October and 109 on 31st October, 106 of which were on the Lagoon (PM/BM). Numbers remained high through much

of November with counts of 80 on 7th, 104 on 14th, 84 on 15th and 76 on 20th. A cold snap from the end of November saw the Duck Marsh and a good part of the Lagoon frozen over for several days and many birds moved on. However, there still daily counts of 30+ birds to the end of the year. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
51	46	24	22	9	10	3	21	41	109	104	36

Pintail *Anas acuta* Scarce Visitor

This was a new bird for the reserve last year, a male being seen on the Lagoon on 12th February. This year there were sightings on two dates. A male was on the Lagoon on 11th February (SW) and a female was on the Duck Marsh on 26th September (BH/PA).

Teal *Anas crecca* Winter/Passage Visitor

Numbers were disappointing throughout the year with only one count of more than 30 birds. In 2011 February, March and the last three months of the year all produced counts of more than 50. This year a count of 36 birds on the Duck Marsh on 22nd January (DC/EC) was the highest of the year. Teal are very timid birds and easily disturbed and it may be that work on the fish pass was a factor. There were sightings on all four wetland areas but, typically, the favourite areas were the Wet Grassland and the Duck Marsh. Numbers tailed off in April, there was just one sighting of a single bird in May and no sightings in June or July. Birds started to arrive again in August with three on the Wet Grassland on 12th. There were daily sightings thereafter but numbers remained low throughout the autumn with a best count of just 22 on the Duck Marsh on 25th November (DC/EC). There was little improvement in December with just single figure counts some days but c30 were reported on the Duck Marsh on 28th (JB). Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
36	20	15	7	1	-	-	18	11	18	22	c30

Mallard *Anas platyrhynchos* **Resident Breeder**

Numbers on the wetlands were frequently low throughout the year . By far the highest count in the first three months came on 8th February but of the 55 birds counted 26 were on the river. The highest count of the year, like last year, came in July with 109 during an early morning WeBS survey on 22nd, 78 of these being on the Lagoon. The first young were seen on 17th April - three tiny ducklings found at the edge of one of the Dragonfly Ponds but two of these were dead and the survivor had to be taken into care (MB et al). Several ducklings were seen on the Wet Grassland two days later on 19th April (JB). On 30th May a female mallard with six very dark coloured ducklings was seen on the Lagoon (JB/MB et al) closely accompanied by a male tufted duck. However, by 8th June only three ducklings remained but the unlikely stepfather was still in close attendance. A female with 11 ducklings was on the Wet Grassland on 31st May and a female with eight ducklings was on the Duck Marsh from 1st June. On 3rd June a female with nine ducklings was seen on the path by the Education Pond (JB/MB). What was probably the same family was seen on the ditch at the Dragonfly Ponds on the same date (JP). On 4th June a female with 10 ducklings was on the Lagoon. A further family of eight tiny ducklings was on the grass between the Lagoon and Duck Marsh on 12th June (PM/BM). Numbers fell away considerably in October and November produced a best count of just 13 on the wetlands. It was little better in December with the highest number reported being 15 birds. Just off the reserve, the canal by the main gates produced counts of up to 32 in December. Monthly maxima, adults only, are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
27	55	27	27	21	50	109	78	91	48	13	15

Garganey *Anas querquedula* **Scarce Visitor**

There were no reported sightings this year.

Shoveler *Anas clypeata* **Winter/Passage Visitor**

Birds were present daily throughout January with a best count of seven on 8th (PM/BM) and again on 11th (DC/EC). There were sightings on just five dates in February and three dates in March. Typically, there were then just a handful of sightings from the

beginning of April to the middle of September when birds started to appear on the Lagoon again. However, the last two and a half months of the year were very disappointing with no birds seen in November and just a single female on the Lagoon on 1st December. Monthly maxima are shown below.

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

Pochard *Aythya ferina* Winter/Passage Visitor

A single male was on the Lagoon almost daily from 13th January to 14th March. Two birds were present on 11th February, three on 23rd February and two again on 12th March. There were no further sightings after 14th March until 24th October when a single male was on the Lagoon. There were sightings most days from 10th November when two were on the Lagoon and three on the Duck Marsh (DC/EC). Four were on the Duck Marsh on 11th November and 18th November; five were on the Lagoon on 20th November and four there on 24th November. Up to four birds were reported in the first half of December but there were no sightings after 16th. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
1	3	2	-	-	-	-	-	-	1	5	4

Tufted Duck *Aythya fuligula* Resident Breeder

Numbers were well down on last year and for the third year running this species failed to raise young on the reserve. January and February last year produced several counts of between 60 and 76 birds but numbers were very disappointing in January this year. February produced some better counts with up to 53 birds recorded, icy conditions bringing birds onto the Lagoon and river with other local waterways frozen over. Numbers fell away considerably in March. At the end of May six dark coloured ducklings on the Lagoon were accompanied by a male tufted duck and a female mallard, the latter proving to be the true parent. With a handful of birds still on the Lagoon in June it was hoped that breeding would occur and one

female did attempt to nest on the middle island. Unfortunately the nest was raided by a mink on 4th July, one observer reporting the mink taking seven eggs to its den on the far island. Throughout August just one male and one female remained on the reserve and no more than three were reported in September. Numbers did reach five in October but November was very poor with just a single male on one date. Numbers did start to build following a cold snap at the beginning of December, reaching 26 on 15th (DC/EC) but they dropped back again prior to Christmas with the arrival of milder conditions. No more than four birds were recorded in the last week of the year. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
30	53	14	16	10	6	7	2	3	5	1	26

Goldeneye *Bucephala clangula* Winter Visitor

It was by far the best year to date for this species with record counts in both February and March. There were no sightings in January and a single female on the river on 4th February was the first of the year. On 5th February a male and two females were on the Lagoon which was partly frozen over at the time. On 11th February five males and nine females were on the Lagoon (CF) - a record count for the reserve - but they had gone by the next day. From 15th February birds were present daily with seven on 26th February (JB) and eight on 11th March (DC/EC) the best counts. Three females on the Lagoon on 18th March were the last of the winter (DC/EC). There were just four records in the latter part of the year - a single male on the Lagoon on 11th and 26th November and a single female on 29th and 30th December. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
-	14	8	-	-	-	-	-	-	-	1	1

Goosander *Mergus merganser* Frequent Visitor

Dusk counts on the Lagoon in January were a bit disappointing with 18 on 18th the best and 17 on 29th (PM/BM et al). A count of 29 (13 males and 16 females) on 12th February was encouraging taking into account the fact that 60% of the Lagoon was ice-bound at the time.

This was also the highest count of the year (28 in 2011). Numbers started to fall away from the end of February but there were regular sightings on the river in March with a best count of eight on 1st (JB/MB). In April up to five were seen on the river from the bridge and on 20th May three males were on the river behind the Wet Grassland (JB/MB). It seems likely that breeding took place close by on the river as five juveniles were seen upstream of the bridge on 21st July (PM/BM). A few birds started to come onto the Lagoon towards dusk in November with 12 reported on 24th (PC/PS); 19 were counted in very cold conditions on 1st December (PC) and 21 (10♂+11♀) at 4.15pm on 13th December with only a very small area of the Lagoon ice-free (PM/BM). With the return of milder conditions dusk counts prior to Christmas were disappointing with no more than five birds and some days none. The maximum daily count for each month is shown below (adults only).

J	F	M	A	M	J	J	A	S	O	N	D
18	29	8	5	3	1	-	3	-	3	12	21

Ruddy Duck *Oxyura jamaicensis* **Casual Breeder**

Not unexpectedly, there were again no sightings this year. The countrywide DEFRA cull has apparently been very successful. This species bred on the reserve in 2004, 2005 and 2006 and was last seen here on 16th May 2009.

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

A single bird at the edge of the Willow Coppice on 24th April (JB/MB) was the first sighting since 1st April 2010.

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

A number of birds released on the reserve in July 2010 appeared to settle in well and there were regular sightings for a time. However, sightings fell away in 2011 and there were none in the second half of the year. This year there was just one report of a single bird behind the Reedbed on 2nd May (JB).

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

This remains a common bird on the reserve with daily sightings throughout the year. Birds were regular visitors to the feeders in the Manager's Garden and Sensory Garden. Most sightings involved one or two birds but five females flew out of the coppice late in the afternoon on 15th January (PM/BM); six were accidentally flushed in the Reedbed on 6th February (BM); six females were seen there on 13th February (PM/BM); a male and seven females flew off Tim's Field on 8th December (DC/EC); 20 flew off Tim's Field on 16th December (PC) and 12 were seen there on 28th December (JB/MB). However, by far the highest counts of the year were made during early morning WeBS surveys in February and March. An amazing 42 flew off Tim's Field on 12th February and 29 flew off the field on 11th March, the birds clearly gathering here for the abundant supply of seed. There were only a few reports of young this year, very wet conditions probably affecting breeding success. There was a report of three chicks in early June; a chick was seen on Mike Fisk Meadow on 23rd June; a female was sitting on eggs in the meadow on 3rd August (DW); a female and three juveniles were seen in the Willow Coppice on 10th August (JK) and what may have been the same birds were seen by the farmland manure heap on 19th August (JB). On 4th September a juvenile was seen on Mike Fisk Meadow with a male and three females (JB/MB).

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

Numbers on the wetlands in the first three months of the year were well down on last year. However, up to three were seen on the river in February and it may be that this is where most of them were in the late winter months. After last year's disastrous breeding season it was a successful one this year with at least four broods of young and possibly as many as six. The first family appeared on the Wet Grassland on 20th June (PA) and on 24th June two chicks were reported on the Duck Marsh (JC). These were probably part of a family of four chicks seen in the same area on 27th June (DC/EC et al). In the latter part of July a bird was sitting on a nest on a thick bank of algae on the Lagoon. Such nests are vulnerable to both the weather and mink predation but this one succeeded and two chicks hatched successfully. A new family of four chicks appeared on the Wet Grassland on 13th August (PM/BM et al). Up to seven juveniles were reported on the Lagoon in the latter part of August. A pair of

adults and two chicks were also seen on the Duck Marsh in the early part of September. Several birds could be seen on the Lagoon and Duck Marsh throughout October but numbers dropped in November and December. However, there were frequent sightings on the river. Monthly maxima are shown below (adults only).

J	F	M	A	M	J	J	A	S	O	N	D
2	4	5	4	3	3	6	9	11	8	3	2

Great Crested Grebe *Podiceps cristatus* **Casual Breeder**

After a disappointing year in 2011 this year saw a big improvement in terms of sightings and it is likely that successful breeding would have occurred but for mink predation. A single bird arrived on the Lagoon on 25th February (DC/EC et al) but there were no further sightings until 6th March when two birds appeared. The pair stayed and were observed displaying on 23rd March (PM/BM). On 30th March they were nest building at the far side of the Lagoon. The birds continued to be seen daily but on 30th May they had turned their attentions to nest building on the near side of the Lagoon to the left of the Lagoon Hide. The following day a bird was reported sitting on the nest. From subsequent events it now seems likely that the eggs were taken by a mink that had taken up residence on one of the islands. There were no sightings after 17th June.

Cormorant *Phalacrocorax carbo* **Frequent Visitor**

There were again daily sightings in every month. Up to five were seen on the pylon at the back of the Reedbed and this proved a popular resting place throughout the year. Birds were daily visitors to the Lagoon, either fishing or loafing on the middle island. One or two first year birds with a completely white chest and belly were seen on several dates from 2nd August. Up to five birds were reported on a number of dates but nine flying over the farmland on 16th December during an early morning WeBS survey was the highest count of the year.

Little Egret (*Egretta garzetta*) **Scarce Visitor**

Last year was the best to date for this species with sightings on five dates and three birds on one occasion - all between 7th July and 3rd August. Hopes were high for a repeat this year when one was seen

flying low over the Scrubland on 23rd July (PM/BM). Unfortunately, there was to be just one further sighting. A single bird was seen on 22nd September as it moved between the Wet Grassland, Reedbed and riverside trees behind the Duck Marsh (DC/EC et al).

Grey Heron *Ardea cinerea* Resident

A common bird on the reserve, recorded in all months of the year. Surprisingly, a count of 10 on the Duck Marsh and in riverside trees beyond on 25th January (BH) turned out to be the best of the year. Single figure counts are fairly typical in the first half of the year but numbers usually tend to build from July onwards. However, this wasn't the case this year and numbers remained fairly constant. Disturbance at the back of the Reedbed during the construction of the fish pass may have had been a factor but this is unlikely. Typically, there were sightings on all the wetland areas, the best counts being made on and behind the Duck Marsh. Birds often dropped in at the Dipping Ponds later in the day and there were numerous sightings on the farmland, eight being seen here on a flooded section on 26th June (JB/MB). The far end of the Scrubland was also popular in the latter part of the year, as was the freshly cut area at the back of the Duck Marsh, seven being seen here on 15th November (PM/BM), eight on 20th November (JB) and six on both 19th and 29th December (DC/EC et al). The highest counts each month are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
10	5	7	4	5	8	8	7	5	4	8	6

Red Kite *Milvus milvus* Frequent Visitor

First recorded on 26th July 2006, this species has now been reported in each of the last seven years but this year was by far the best with sightings reported on 33 dates (eight dates in 2010 and 2011). There were sightings in every month of the year with July and December the most productive months. Most reports involved single birds but two were seen on four dates; four were seen over the Visitor Centre on 5th September (GJB) and three were over the Scrubland on 11th November (PC).

Sparrowhawk *Accipiter nisus* **Resident Breeder**

There were sightings most days throughout the year. In January and February birds were observed on several occasions pursuing linnets through the fodder radish on Tim's Field. On 12th March three were seen together circling high over the Willow Coppice (JB/MB) and three flew over the Scrubland on 26th March (JB). On 26th May a female flew across Tim's Field pursued by lapwings (PM/BM). A pair almost certainly bred again in woodland across the river and a juvenile was seen over the river path on 27th July (PM/BM). On 30th July an adult female and a juvenile female were seen over the woodland from the river path (PM/BM). There were several reports of small birds chasing sparrowhawks. On 3rd August one was pursued by goldfinches across Tim's Field (LR). On 9th August one was being chased by a swallow near the radio mast and on 13th August five swallows pursued a male sparrowhawk near the Manager's Garden (JB/MB et al). A very dark female was seen flying across Tim's Field on 16th December and what was probably the same bird was observed pursuing linnets across the field on 19th December (DC/EC).

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

2012 was the best year to date as regards number of records. There were sightings on 12 dates in 2010, 11 dates in 2011 and 18 dates this year. Sightings were reported on one date in January, three in February, two in March, one in April, two in July, five in September, two in October and two in November. Most involved single birds but two were seen over woodland on the far bank of the river on 7th March (AB) and three were over the reserve on 6th October (PA).

Honey Buzzard *Pernis apivorus* **Scarce Visitor**

A new bird for the reserve this year, one was photographed high over the Dragonfly Ponds on 13th June (DS). The record was subsequently accepted by YNU.

Osprey *Pandion haliaetus* **Scarce Visitor**

There were no sightings this year. One that flew over the reserve on 12th April 2008 was the first and only record.

Kestrel *Falco tinnunculus* **Resident Breeder**

After four consecutive successful years nesting in one of the barn owl boxes in the Yorkshire Water compound things were looking positive for a fifth year with birds seen at the box fairly regularly from the latter part of February. Both male and female birds were seen at the box on 11th March. On 2nd June a bird in the box was heard calling at a carrion crow perched on top of the box (PM/BM) and on 30th July a bird was seen on the box calling (JK). Unfortunately, there were no reports of prey being taken into the box and it became clear that no chicks had hatched. When the box was checked later in the year no evidence of attempted nesting was found. Birds continued to hunt on the reserve to the end of the year. The failure to nest may well have been down to a difficulty in finding prey due to very long vegetation as a result of the extremely wet spring and summer.

Hobby *Falco subbuteo* **Scarce Visitor**

Prior to this year there had been just one reported sighting of a hobby on 10th July 2005. This year one was seen just off the reserve on 7th July (PC). The bird was observed catching insects over the trees at the back of the park on Town Street.

Merlin *Falco columbarius* **Infrequent Visitor**

There were no sightings this year.

Peregrine Falcon *Falco peregrinus* **Scarce Visitor**

There were three records this year. One flew over the Lagoon on 22nd April (LJ); one flew over the Visitor Centre on 29th September (PA) and one was seen in a tree at the back of the Reedbed on 17th November (AT).

Water Rail *Rallus aquaticus* **Casual Breeder and Winter Visitor**

Formerly regarded as just a winter visitor here, there have been reports of birds in July and August in recent years and there were suspicions that at least one pair had bred. However, this year the sighting of an adult and five chicks on the Duck Marsh on 4th July (PA et al) confirmed our suspicions. There was a good spread of sightings in January and February with birds seen on the Lagoon, Duck Marsh, Reedbed and Wet Grassland with two birds seen on 12th and 15th February. There was just one sighting on the Wet Grassland and one on the Lagoon in March. One was seen in the

Reedbed on 5th April and one was heard on the Duck Marsh on 27th April but there were then no further records until 4th July when the adult and five chicks were seen on the Duck Marsh. One or two chicks continued to be seen on the Duck Marsh until 22nd July. An adult was reported on the Wet Grassland on 11th August, one was seen at the Education Pond on 23rd September (JB) and one was on the Duck Marsh on 26th September (JS/PA). The latter part of the autumn was disappointing with just four records of single birds on 27th October, 31st October, 10th November and 20th November. However, if birds were not being seen they were certainly present, a survey on 17th December revealing at least four calling birds, one of these on the Wet Grassland and three in the Reedbed. On 24th December there was a rare sighting on the riverbank, one being seen from the bridge (JB).

Spotted Crake *Porzana porzana* **Scarce Visitor**

There were no sightings this year. An adult bird was present on the Wet Grassland for five days from 1st October 2005.

Moorhen *Gallinula chloropus* **Resident Breeder**

This is a common bird on all the wetland areas. In the first few months of the year there were also several double figure counts at the edge of the farmland near the river. It appeared to be a rather better breeding season than last year. The first two chicks were seen in the Reedbed on 6th May (DC/EC), just two days earlier than last year. Four chicks were seen there three days later. A single chick was seen on the Wet Grassland on 13th May. There were no further reports of young until 12th June when three were seen on the Lagoon. Further broods of young appeared on the Lagoon, Wet Grassland and Duck Marsh in August. At least one pair also bred at the Dragonfly Ponds, though only one chick was reported. Good numbers of birds were present in the autumn. Twenty were counted during an early morning WeBS survey on 14th October; 26 were reported on 1st November and 32 on 15th November (PM/BM), this being the highest of the year. Birds were less obvious in the very icy conditions in the first part of December but 18 were reported on the farmland close to the river on 16th (JC) and 21 were counted during a WeBS survey on the same date. Monthly maxima (adults only) are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
13	14	10	6	5	10	8	19	16	20	32	21

Coot *Fulica atra* Resident Breeder

Numbers in January and February were somewhat higher than last year and there were three 40+ counts in February. The highest count of the year - 46 - came on 12th February during an early morning WeBS survey. The first nesting bird was seen on the Wet Grassland on the early date of 30th March (PM/BM). By 8th April at least four birds were on nests on the Wet Grassland and on 16th April three were reported on nests on the Lagoon. The first three chicks were seen on the Lagoon on 19th April (JB) and the first two on the Wet Grassland on 21st April (JKi). Subsequent broods of young appeared on all four wetland areas and it appears to have been a very successful breeding season. There were several 30+ counts on the Lagoon in October with 40 on 15th the highest (PM/BM). Numbers fell away considerably in November with a best count of just 18 birds. With most of the wetlands ice-bound in the early part of December numbers remained low and there was little improvement when milder conditions returned prior to Christmas. Monthly maxima (adults only) are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
35	46	28	23	17	14	14	21	25	40	18	18

Oystercatcher *Haematopus ostralegus* Migrant Breeder

A pair had bred on the middle island on the Lagoon each year from 2006 to 2009 but in 2010 and 2011 breeding was almost certainly thwarted by crows. This year the first bird arrived on 12th February, exactly the same date as last year. Two birds were present from 18th February and on 23rd March mating was observed on the middle island. Three birds were on the island on 4th April but the intruder quickly departed. Curiously one of the resident birds had a crossed bill but this did not appear to affect its ability to feed. A third bird was again present briefly on 19th May. For a time there seemed some doubt as to which island the birds were nesting on but two chicks made their first appearance on the middle island on 9th June (JB).

Four adults flew over the compound on the same date (PM/BM et al). On 11th June both adults and the two chicks were seen on the grassy bank between the Lagoon and Duck Marsh and thereafter the birds took up residence on the Duck Marsh. From 20th June only one chick was seen and this appears to have fledged successfully. Three birds on the soil heaps near the Manager's Garden on 8th July may have included the youngster. There were no sightings after 15th July.

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

Numbers of sightings have declined over recent years and last year produced just one bird on 1st June. This year, for only the second time in the reserve's history, there were no sightings reported.

Ringed Plover *Charadrius hiaticula* **Migrant Visitor**

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

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

There have been no records in the last four years.

Lapwing *Vanellus vanellus* **Casual Breeder**

Forty-four flew over the Lagoon on 9th January (PM/BM) but apart from this there was just one other sighting of a single bird in January. Thirteen were reported over Tim's Field on 4th February (GJB) and there were regular sightings of up to eight thereafter in February with 28 seen over the reserve on 2nd March (JB). After this date up to four were seen on the Lagoon, Duck Marsh and Tim's Field. Last year three pairs produced at least five young on Tim's Field and this was the only area where breeding was successful this year. Four chicks were counted on 26th May (PA) and there were further sightings of between one and four chicks up to 8th June. At least two and possibly three pairs nested. Sightings tailed off from the end of June with just one report of a single bird on 22nd July and a sighting of two birds on the Duck Marsh on 1st August. On 12th September around 100 were seen over the farmland (PA) but there were then no further sightings until 26th October when a single bird flew over the Duck Marsh. One was on the Wet Grassland on 17th November. In December two were on the farmland on 2nd and 42 flew over the Visitor Centre on 19th (DC/EC). Maximum monthly counts are shown below (adults only).

J	F	M	A	M	J	J	A	S	O	N	D
44	13	28	8	6	7	1	2	c100	1	1	42

Knot *Calidris canutus* **Scarce Visitor**

There were no sightings this year. A bird on the Duck Marsh on 28th May 2006 was the first record for the reserve.

Dunlin *Calidris alpina* **Infrequent Visitor**

A single bird seen on the Duck Marsh on 1st February (KM et al) was the first record since May 2006.

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

After a blank year in 2011 there were sightings on three dates this year. In each case a single bird was accidentally flushed on the Duck Marsh on 8th March (JB), on 16th March (PM) and on 3rd April (JB).

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

The Duck Marsh again produced the most sightings but the number of records was somewhat down on last year. The highest counts always occur when birds are accidentally flushed and this was again the case this year when 18 were counted on the Duck Marsh on 16th March (PM/BM). Surprisingly there were no other double figure counts. A bird at the Dragonfly Ponds on 22nd April was the last of the spring (JB). There were no further sightings until 4th August when one was reported on the Duck Marsh. There were regular sightings thereafter, mainly of just one or two birds. Six were accidentally flushed on the Wet Grassland on 22nd October (JB/DAN) and six were seen at the edge of the Lagoon on 5th and 8th December (PA). During a water rail survey on 17th December 13 were accidentally flushed at the edge of the Lagoon and two on the Duck Marsh. On 22nd December seven were seen at the edge of the Lagoon (JH). The numbers of dates that birds were recorded in the various habitats are shown below. Last year's figures are shown in brackets for comparison.

Lagoon	Duck Marsh	Reedbed	Wet Grassland	Other
16 (7)	37 (54)	3 (9)	3 (5)	3 (2)

Maximum monthly counts are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
4	2	18	5	-	-	-	2	1	6	4	15

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

No sightings were reported this year. This species has only been recorded on the reserve on three occasions.

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

No sightings were reported this year. This species was recorded for the first time on 7th May 2006 when a single bird was found on the Duck Marsh.

Whimbrel *Numenius phaeopus* **Scarce Visitor**

After a blank year in 2011 there was just one reported sighting this year - a single bird flying over the Lagoon on 2nd May (MW).

Curlew *Numenius arquata* **Migrant Visitor**

It was a poor year with infrequent sightings. A single bird flying over the Lagoon on 29th January was the first of the year (JC). One was reported on the farmland on 11th March (BH) and one was there again on 7th and 8th April. A bird flew over the Willow Coppice on 2nd May (MW) and one was calling on the farmland on 7th June (PM/BM). One was again calling on the farmland on 24th June (JB). There were no further reports until 10th October when one flew over the Willow Path (AB/PA). There were no sightings after this date.

Woodcock *Scolopax rusticola* **Infrequent Visitor**

There were three records of birds in the Willow Coppice in the latter part of 2011 following an influx of birds from the continent. However, there were no sightings this year until 18th November when one flew out of a ditch near the Wet Grassland hide (PC). There were no other records.

Common Redshank *Tringa totanus* **Infrequent Visitor**

There was an unconfirmed report of a single bird flying off one of the islands on the Lagoon on 3rd February. There were no other sightings. Last year produced sightings of a single bird on four dates.

Greenshank *Tringa nebularia* **Infrequent Visitor**

There were no sightings again this year. In 2010 two birds were reported on two dates. These were the first records since 28th March 2002.

Green Sandpiper *Tringa ochropus* **Infrequent Visitor**

This species is predominantly a passage bird in Britain with a few staying throughout the winter. There were no records this year. The last sighting was on 3rd May 2011.

Wood Sandpiper *Tringa glareola* **Scarce Visitor**

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

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

Following a decline in sightings over recent years there was a considerable improvement this year. A bird was seen on the Lagoon on 26th April (JB). There were further sightings of a single bird here on 30th April, 2nd May and 10th May. What was possibly the same bird was also seen on the Duck Marsh on 2nd May. There were no further sightings until 28th June when one was again seen on the Lagoon (JB). There was a further sighting on the Lagoon on 7th July (DC/EC/JM) and one was seen on the river from the bridge on 1st September (PC).

Black-headed Gull *Chroicocephalus ridibundus* **Frequent Visitor**

The joint highest count of the year came on 6th January with c300 birds on the flooded farmland behind the car park (PM/BM). There were several substantial gatherings on the Lagoon in January and February with 250 the best on 16th January (PM/BM). Typically, numbers dropped away sharply after the middle of March but a few lingered through April with a pair displaying on the Duck Marsh on 5th April. Birds were few and far between in May and June but the first juveniles started to appear in July. However, numbers were low and

apart from a count of 62 on 25th July numbers were generally in single figures. More than 100 were on the farmland on 30th September (DC/EC) but counts in October were somewhat lower than last year. Up to 120 were seen on the Lagoon in November but a count of c300 over the farmland on 15th was the joint highest of the year and by far the highest of the autumn. Up to 120 were reported on both the Lagoon and Duck Marsh in December but the largest gatherings were again on the farmland with more than 200 birds some days. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
c300	c200	125	9	3	2	62	22	100+	c300	c300	200+

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

Counts in January and February were rather higher than last year but this species is almost certainly under-recorded numbers-wise. A report of 40 on the partially frozen Lagoon on 4th February was the highest in the first part of the year (PM/BM). Sightings are always few and far between in April, May and June and no more than four were reported in the first half of July. However, the freshly cut farmland brought in 44 birds on 25th July (PM/BM). Around 50 were on the farmland on 15th November (PM/BM) and a similar number were there again on 5th December (PM). However, more than 100 birds were on the farmland some days from 7th December. Monthly maxima are shown below.

J	F	M	A	M	J	J	A	S	O	N	D
30	40	4	3	1	-	44	10	2	-	50	100+

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

Recorded in all months except September and October this year. One or two were seen on the Lagoon, Duck Marsh and farmland on several dates but seven were on the farmland early in the day on 13th June (PM/BM) and nine flew high over the compound on 22nd July during an early morning WeBS count.

Herring Gull *Larus argentatus* **Infrequent Visitor**

The only records this year were of birds flying over the reserve. Several groups of large gulls flying high over the reserve in an easterly direction at dusk on 29th November - probably 80 birds in total - were probably this species (PM/BM).

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

Sightings are limited to the occasional fly over and there had only been one confirmed sighting in the last seven years. This year a bird was seen by three observers flying over the Wet Grassland on 19th December (DC/EC/JH).

Iceland Gull *Larus glaucoides* **Scarce Visitor**

There were no records this year. Two 1st winter birds that flew over the Willow Path on 17th January 2009 were the first for the reserve. A detailed description was submitted.

Common Tern *Sterna hirundo* **Migrant Breeder**

The first bird arrived on one of the rafts on the Lagoon on 18th April (JB/PA), eight days later than last year. Two birds were present on 22nd and a third bird was seen on 23rd. After that up to four were seen some days with five on 14th May (JB/MB) and six on 17th May (JB) and 26th May (PA). A pair had taken up residence on one of the rafts in April but by the end of May a second pair was spending time on the middle island and showing signs of nesting. On 5th June one chick made its first appearance on the raft and while the female appeared to sit for a further day or so no further chicks appeared. Seven adults on the Lagoon on 13th June was the highest count of the year (PA/MW). Six were reported on 16th June and five on 17th and 18th. With all the nests washed out at Swillington it is possible some of those birds may have moved up the river exploring potential new sites. The juvenile left the raft to swim round on the Lagoon from 25th June and made its first flights on 5th July. Whilst the second pair settled down on the middle island the nest was almost certainly predated by a mink that had taken up residence on the bottom island. Five adults were again reported on 12th July, this time flying over the Reedbed during the evening. Three adults and the juvenile were last seen on 24th July (JB/MB).

Arctic Tern *Sterna paradisaea* **Scarce Visitor**

This was a new bird for the reserve last year with four flying over on 24th July. This year there was an unconfirmed report of one with common terns on one of the rafts on 19th May.

Feral Pigeon *Columba livia domest* **Frequent Visitor**

These birds do tend to be overlooked by birdwatchers and there was only one reported sighting of six over the Lagoon on 30th May. However, a flock of more than thirty birds can be seen daily on the roof of the big warehouse on Town Street near the reserve entrance and these birds regularly visit the reserve.

Stock Dove *Columba oenas* **Resident**

Most sightings were again on the farmland and in the Manager's Garden with just a few records from other habitats. Most reports were of 30 birds or less but there were some exceptional counts in March. Sixty-eight were on the farmland on 7th March (PM/BM); 63 were there on 11th March (PM) and c50 were circling over the farmland on 14th March (PM). Numbers from April onwards and throughout the summer were somewhat lower with a best count of 12 in the Manager's Garden on 18th July (DC/EC). Forty were on Mike Fisk Meadow on 10th October (DW) but there were no other counts of more than a dozen or so birds until 9th December when 21 were on the farmland (PC). Twenty-two were reported there on 23rd December (DC/EC).

Wood Pigeon *Columba palumbus* **Resident Breeder**

More than 100 were on Tim's Field on 1st and 2nd January and between 200 and 250 were in riverside trees on 25th January. However, the first of several 300+ counts came on 26th January on Tim's Field (JB/PM et al). There were similar counts on Tim's Field on 5th and 6th February and more than 400 were there on 1st March (JB/PM). The main attraction was almost certainly the bumper crop of fodder radish seed. More than 300 were counted here again on 6th March and around 400 during an early morning WeBS survey on 11th March. Numbers fell away somewhat after this date with a best count of just 80 during the next WeBS survey on 8th April. Several pairs again nested on the reserve, mainly in the Willow Coppice. Numbers started to build again in October and among the higher counts 91 were on the farmland on 14th October; 100+ were on Tim's Field on

15th November; 130 were there on 16th and 18th December and 150 on 28th December (JB/MB).

Collared Dove *Streptopelia decaocto* **Frequent Visitor**

It was a very poor year with sightings reported on just three dates. The most likely place to see this species is on the entry road between the main gates and the river bridge and the first two sightings were here - two birds on 8th April and one on 9th May. The only other record was of a bird flying over the Scrubland on 14th June (JB/MB).

Cuckoo *Cuculus canorus* **Scarce Visitor**

This declining visitor had only been recorded on two occasions prior to this year so a first year bird that spent a week on the reserve in July was a bit of a bonus. The bird was first seen on a small dead tree at the Dragonfly Ponds on 19th July (PM/BM). Over the next few days it alternated between the Scrubland and the Dragonfly Ponds and was seen well by a number of birdwatchers. It was last seen on 25th July.

Barn Owl *Tyto alba* **Scarce Visitor**

First recorded on the reserve in 2008, there had been no sightings since 7th August 2010. However, one was seen on the farmland behind the poplars at 9.00pm on 31st July (JB). Further evening checks were carried out but there were no other sightings.

Little Owl *Athene noctua* **Casual Breeder**

Sightings of this species have always been few and far between and last year was by far the best with records on 13 dates. This year January and February each produced just one sighting on the farmland. On 22nd April one was seen on the field to the right of the path to the Manager's Garden and on 26th May one was perched on overhead wires at the edge of the farmland at 10.00pm. However, from 5th June there were daily sightings in the area of the Sludge Lagoon with one and sometimes two birds perched on the fence. On 11th July three were seen at 9.30pm, one carrying a small rodent (PM/BM) and on 19th July an adult was observed bringing food to a juvenile on the fence (PM). Three birds were seen on further occasions and on 5th August four were reported on the fence (JMC/TRC). On 12th August five were seen (GJB/KW), at least three of which were clearly juveniles. Subsequent investigation revealed

that the birds had nested in a box at the back of the Sludge Lagoon. This is the first time that breeding has occurred on the reserve. The juveniles probably dispersed sometime towards the end of August with usually just one and occasionally two birds seen on the fence from the beginning of September. On 24th October one was seen on the Willow Path (DW) and on 7th November one was reported in the coppice (AJS). In December activity was restricted to dusk. On 16th one flew across the Willow Path and into the coppice at 4.25pm and on 18th at a similar time birds were calling in the coppice and on the farmland (PM/BM). On 19th December one flew past the Visitor Centre and over the compound at dusk (MB et al).

Tawny Owl *Strix aluco* Infrequent Visitor

There were records on four dates this year. One was seen at the far side of the Lagoon during the evening on 20th June (JB); one was seen on a large nest box in the same area on 26th June (JB); one was calling in riverside trees at 10.45pm on 11th August (PM/BM et al) and on 1st October a bird was seen on the Willow Path (JB/MB).

Swift *Apus apus* Migrant Visitor

This species continues to be remarkably consistent in its arrival date at Rodley each spring as the following shows:

2006	26th April	2010	25th April
2007	25th April	2011	29th April
2008	26th April	2012	26th April
2009	25th April		

This year a single bird over the road near the car park on 26th April was the first of the year (PM/BM). Numbers soon built and 11 were seen over the Lagoon on 2nd May. By the middle of May scores were over the wetlands some evenings. Numbers remained high through June with at least 50 over the Dragonfly Ponds and river during the Springwatch event on 9th June and a similar number over the Lagoon on 13th June. Sixty plus were estimated over the Lagoon on 1st July (JB/MB). Birds were seen daily throughout August but no double figure counts were reported. Two over the farmland on 3rd September were the last of the year (JB/MB), two days later than last year. It is hoped that this species may be encouraged to nest on the reserve in the future using a new nesting tower erected at the back of the Reedbed in October.

Kingfisher *Alcedo atthis* Resident Breeder

Last year we had to wait until 30th May for the first sighting on the Kingfisher Pool and there were just four records in the first four months of the year. This year a bird was seen on the Kingfisher Pool on 1st January (GJB) and there were further sightings on 7th, 8th and 18th. There were no sightings in February and just one in March - two birds on the river seen during an early morning WeBS count on 11th. April too was poor with just two sightings of a bird on the river opposite the Scrubland on 9th and 22nd. There was a dramatic improvement from 19th May with sightings almost daily. Most reports involved single birds but two were seen together on several dates. Most sightings were on the Lagoon, Duck Marsh, Reedbed and river but birds also turned up at the Dipping Ponds, on the Willow Path, at the Dragonfly Ponds and at the Education Pond. On 9th July one was found dead outside the Visitor Centre, having apparently flown into a window. On 8th August three were seen on the Lagoon (PA). From the middle of September the large majority of sightings were on the Kingfisher Pool. Observers reported birds catching small fish almost every dive with as many as 10 caught in a short spell of fishing. It was a much better year than last year as regards number of sightings and this may well be due to the fact that river levels were frequently very high this year, forcing birds onto the reserve to fish successfully. Sightings tailed off somewhat after the middle of November but this was more likely due to the fact that the Reedbed Hide was out of bounds from 21st November due to improvement work.

Green Woodpecker *Picus viridis* Infrequent Visitor

Each year usually produces two or three records but there were none this year.

Great Spotted Woodpecker *Dendrocopos major* Resident Breeder

This is a regular visitor to the reserve from woodland across the river. However, sightings were unusually few and far between in the first five months of this year. There were sightings of a single bird on three dates in January but there was only one other record in the next four months. Activity improved considerably from 19th May with sightings on the Willow Path, in the Willow Coppice, in the Manager's Garden and on the river path. Two were seen by the Lagoon on 20th May and two flew over the Lagoon Hide on 30th May (JB/MB et al). There were regular sightings throughout the summer and autumn months

and birds were seen on several dates in December, the Willow Path being the most productive area.

Skylark *Alauda arvensis* **Infrequent Visitor**

This species is still just about hanging on in this part of the valley. After three blank years there were records on three dates in 2011. This year there were sightings on four dates. Two flew over Tim's Field on 16th February (AP); one flew over the same field on 1st March (JB/MB); one was singing on the farmland on 1st June (PM/BM) and on 7th June one was singing over the Willow Coppice (PM).

Sand Martin *Riparia riparia* **Migrant Visitor**

It was a poor year for this species with no double figure counts reported until the beginning of August. With the wettest summer for more than 100 years and the river frequently running bank high it is almost certain that many nests were washed out. A single bird over the Lagoon on 28th March was the first of the year (TP), just a day earlier than last year. There were no further reports until 11th April when seven were over the Lagoon. Around 40 were over Tim's Field late in the evening on 2nd August and more than 100 were over the reserve at 8.00pm on 5th September (PM/BM) but there was again no evidence of a Reedbed roost. There were no further sightings until 18th September when more than 200 swallows and sand martins were reported over the Reedbed (JB/MB). This was also the last sighting of the year, seven days earlier than last year.

Swallow *Hirundo rustica* **Migrant Visitor and Casual Breeder**

It was a much better year for this species. One over the Lagoon on 3rd April was the first sighting of the spring (AP), four days later than last year. More than 25 were seen hunting low over the Lagoon in very wet conditions on 29th April (PM/JB). This was in sharp contrast to last year when there were no double figure counts until August. On 15th May more than 70 were over the Lagoon in a cold northerly wind with possibly more than 100 over the wetlands in total (PM/BM et al). More than 50 were over the Lagoon during the evening of 3rd June (PM/BM). Suitable nest sites on the reserve are few and far between so the decision to erect some nesting platforms in the new shed for the dumper truck seemed a good idea. And so it proved with a pair successfully raising four young there at the beginning of August. An

adult was observed chasing a sparrowhawk past the radio mast on 9th August. There were some good counts on overhead wires near the mast and the Visitor Centre. Among the highest were 67 on 10th August (JB) and 35 on 29th August (JB/PM). On 11th August between 150 and 200 were over the farmland and Mike Fisk Meadow at 8.10pm (PM/JB et al). On 18th September more than 200 swallows and sand martins were reported over the Reedbed (JB/MB). Numbers fell away quickly after this date and a single bird over the Visitor Centre on 29th September was the last of the year (JB/MB), nine days earlier than last year.

House Martin *Delichon urbica* **Migrant Visitor**

A single bird over the Lagoon on 7th April was the first of the spring (PA), more than two weeks earlier than last year. Numbers remained low throughout April with a best count of just three. There was some improvement in May with up to 12 reported over the Lagoon. Four were seen collecting mud for nest building on 27th June (DC/EC/MW). Around 18 high over the Lagoon on 23rd September was both the highest count and last reported sighting of the year (PC), just two days earlier than last year.

Meadow Pipit *Anthus pratensis* **Passage Visitor**

The number of sightings has declined considerably over recent years but there was some improvement in 2010 with a number of records in the last three months of the year. However, 2011 was very poor with just three records submitted. This year produced just one record - a single bird in, of all places, the Sensory Garden on 12th February (JB/MB).

Yellow Wagtail *Motacilla flava* **Infrequent Visitor**

There were again no sightings this year. There has now only been one confirmed sighting of this species in the last ten years.

Grey Wagtail *Motacilla cinerea* **Frequent Visitor**

There were sightings in eight months of the year in 2010, six months in 2011 and eight months again this year. Two birds were seen at the fish pass site on 31st May (JB/MB) but most other sightings involved just single birds. There were sightings on the manure heap on the farmland, in the Yorkshire Water compound, at the Education Pond and on the riverbank. December was the most productive month with

sightings reported on six dates, five of these at the edge of the farmland and one by the main gates. Two birds were seen on the manure heap on 8th December (CM) and two were by the gate to the farmland on 30th December (GJB).

Pied Wagtail *Motacilla alba* **Casual Breeder ?**

Almost all sightings are in the vicinity of the manure heap on the farmland, in the Yorkshire Water compound and around the Visitor Centre. Surprisingly, sightings were reported on just one date in the first two months of the year. However, there were regular sightings thereafter with up to three birds on occasions. On 1st June a juvenile was seen in the compound and on 4th June two adults were seen with a juvenile in the same area (PM/BM et al) Two juveniles were seen here the previous June and it seems likely that birds are probably breeding somewhere within the compound. On 12th July an adult was seen carrying food in the compound (JB/MB). On 16th July a juvenile was reported by the gate to the Willow Coppice (JB/MB/BM) but on 22nd July a juvenile was killed when it flew into the glass door of the Visitor Centre. There were only a handful of sightings reported in August and September but birds were seen daily from the beginning of October to the end of the year. A report of five at the edge of the farmland on 14th November was the highest of the year (DW).

Dipper *Cinclus cinclus* **Scarce Visitor**

There were again no sightings this year. The streamy water just downstream of the weir has produced sightings in the past and the new fish pass may turn out to be productive in the future.

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

First recorded on the reserve in November 2010, there was one sighting in 2011 and one this year. Twenty birds were watched feeding on rowan berries near the Manager's Garden on 9th December (JC et al). Unfortunately, flocks of waxwings tend to be very mobile, moving on very quickly and with few berries to hold them this winter they were soon gone.

Wren *Troglodytes troglodytes* **Resident Breeder**

This remains a very common bird on the reserve and it can be found in every habitat. This was certainly the case during an early morning

survey on 16th January which logged a total of 13 birds including four in the Reedbed. As last year, a pair again nested in the hide at the Manager's Garden, this time building in an artificial swallow nest. The young fledged successfully on 26th May. Prior to this one juvenile had fallen out of the nest and been returned. On 8th June five juveniles were seen at the edge of the Lagoon (JB). On 8th July one was seen gathering nesting material in the Manager's Garden (DC/EC). There were no further reports of juveniles but birds continued to be seen almost daily in the Manager's Garden to the end of the year.

Dunnock *Prunella modularis* **Resident Breeder**

This is a very common bird on the reserve and found in most habitats. It is also a daily visitor to the feeders in the Manager's Garden and Sensory Garden. Up to six birds were reported at these two sites. The first juvenile was seen in the Manager's Garden on 7th May (DC/EC).

Robin *Erithacus rubecula* **Resident Breeder**

The large majority of records come from the Manager's Garden, Sensory Garden and Willow Path with sightings throughout the year in the Manager's Garden. The first juvenile was reported here on 21st July (DC/EC) but there was only one further record of a juvenile this year on 13th August (DW), again in the Manager's Garden.

Common Redstart *Phoenicurus phoenicurus* **Scarce Visitor**

First recorded on the reserve in 2006, there had been no sightings since then. This year a female was seen on the Scrubland on 1st September (PC/PS).

Black Redstart *Phoenicurus ochruros* **Scarce 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.

Whinchat *Saxicola rubetra* **Passage Visitor**

Most years tend to produce one record at most of this declining species so sightings on four dates this time has to be regarded as a good year. A bird was on the Scrubland on 8th May (PM/BM) and what was probably the same bird was seen there again the next day

(BH). Two and possibly three birds were on Tim's Field on 5th September (PA et al). Two birds were also seen on the Duck Marsh on 26th September (PA et al).

Stonechat *Saxicola torquata* **Passage Visitor**

The last three years have been disappointing with sightings on just four dates in 2009, none in 2010 and one in 2011. This year was equally disappointing with sightings on just one date. On 19th September a male was reported on Tim's Field (RS). On the same date a female was also reported on Tim's Field (DC/EC).

Wheatear *Oenanthe oenanthe* **Passage Visitor**

Following four blank years there were sightings on five dates this year. One was at the edge of Tim's Field on 19th May (GJB); one flew across the farmland and Mike Fisk Meadow on 31st August (PM/BM et al); one was on Tim's Field on 4th and 5th September (PM/BM) and one was again on Tim's Field on 19th September (ABI).

Blackbird *Turdus merula* **Resident Breeder**

Very common all round the reserve. Counts in the Manager's Garden in January were rather lower than last year with no more than six reported. Numbers in February and March were also rather lower. Broken egg shell on the Willow Path on 4th April was evidence of a thwarted early nesting attempt. Ten adults were counted during an early morning WeBS survey on 20th May. On 4th June an adult was seen carrying food to a nest on the riverbank near the weir but there were no reports of juveniles until 13th July when one was seen on the fence in the Sensory Garden and another was found dead on the path between Tim's Field and the Willow Coppice. One or two juveniles were also seen in the Manager's Garden from 21st July and one was on the ramp to the Butterfly Bank on 19th August. Numbers visiting the feeders in the Manager's Garden in September and October were low with no more than two birds reported but the Willow Coppice produced up to four on occasions. Numbers started to build somewhat from the middle of November, a walk round the reserve on 18th November producing 15 birds including six in the Mike Fisk Meadow hedgerow. However, a very poor berry harvest following the very wet summer failed to hold them for long. One or two birds did resort to guelder rose berries in the Sensory Garden in December.

Fieldfare *Turdus pilaris* **Winter Visitor**

There were daily sightings throughout January and the first three weeks of February but numbers were well down on the same period last year with no counts of more than 80 birds. Last year produced reports of between 300 and 400. Among the better counts 60 flew over the Lagoon on 8th January (JB/PM); 78 flew over landing in trees by the main gate on 25th January (PM et al) and similar numbers were seen over the Lagoon on 12th February and in trees on the farmland on 15th February (JB). Most of the bigger counts were of birds flying in to roost at dusk. There were sightings on just three dates in March with c70 on the farmland on 9th the highest. Sixteen were seen near the bridge on 14th April and seven were in trees in the Manager's Garden on 18th April (DC/EC), this being the last sighting of the spring. The first autumn record came on 27th October, 11 days later than last year, with two birds flying over the reserve (PC). Twelve were reported in the poplars the following day (PC). Birds were seen on just four dates in November but all counts bar one were of less than 10. Thirty one were in trees in the car park on 14th November (MW). There were sightings on five dates in December with 22 birds in the poplars on 22nd the highest number reported (DC/EC).

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

This species continues to do well at Rodley . The first birds were singing a month earlier than last year - on 9th January on the entry road (PM/BM) and in the hedge by the Visitor Centre on 11th January (MW). On 29th March one was observed collecting nesting material in front of the Lagoon Hide. During an early morning WeBS count on 8th April birds were seen by the Lagoon, in the Willow Coppice, on the riverbank, on the Winter Walk and on the access road. On 8th May two were singing on the riverbank, one by the Lagoon, one on the Willow Path, two were seen at the roadside and one by the Visitor Centre. On 2nd June at least seven different birds were singing round the reserve (PM/BM). A bird collecting worms on the grass behind the Visitor Centre on 16th July was probably nesting in the Mike Fisk Meadow hedgerow or in the Sensory Garden. On 30th July one was found sitting on eggs at a nest in a willow at the back of the Wet Grassland during Himalayan balsam removal (DW). A juvenile was reported in the Manager's Garden on 5th August (DC/EC). At least two pairs are thought to have nested in the Willow

Coppice and a fully feathered dead juvenile was found here on 13th August. Sightings typically fell away after the middle of August and there were no records in September. Single birds were reported on four dates in October and two dates in November with two seen at the edge of the Lagoon on 18th November. There was just one sighting of a single bird in the Manager's Garden in December.

Redwing *Turdus iliacus* **Winter Visitor**

Birds were hard to find and in low numbers in the last three months of 2011 and there was no improvement in the new year. There was just one report of a single bird in trees in the Manager's Garden on 17th January (DC/EC); three were seen near the river bridge on 17th March (PC) and two were seen in the same area on 14th April (PC). The first birds of the autumn (six) flew over on 13th October (PC), three days earlier than last year. There were then sightings most days from 20th October to 18th November with just two records of more than 10 birds. Thirty plus were on the farmland on 28th October (SO) and 15 were there the next day (JB/MB). With very few berries in the hedgerows birds didn't stay long and there were just four records in December, 10 flying across the road from the farmland on 19th being the highest count (JB/PM).

Mistle Thrush *Turdus viscivorus* **Frequent Visitor**

There were sightings on just four dates in January, none in February and two in March but birds were singing in woodland on the far side of the river from 9th January. Most records involved just one or two birds but around 12 were on John Ackroyd Meadow on 11th January (DE). Single birds were reported on one date in April, two dates in May and three dates in June. The second half of the year was very disappointing with single birds on just four dates - 2nd October, 17th November, 29th November and 15th December.

Grasshopper Warbler *Locustella naevia*
Migrant Breeder

This is a secretive bird, much more likely to be heard than seen in the long vegetation. A bird was "reeling" on the banking across the road from the Lagoon Hide on 26th April (PM/BM), two days later than the first "reeling" bird last year. One was next heard on the Wet Grassland on 4th May (JB). Birds were then heard on the Scrubland on 6th, 8th, 9th and 12th May and at the Dragonfly Ponds on 1st

June. On 9th June one was seen and heard at the Dragonfly Ponds (JS). There were no records after this date. Whether breeding took place this year is debatable. Last year at least one and possibly two pairs are thought to have bred, one of these at the Dragonfly Ponds.

Sedge Warbler *Acrocephalus schoenobaenus*
Migrant Breeder

Last year a bird singing on the Duck Marsh on 20th April was the earliest ever spring record for this species. This year two were seen on the Duck Marsh on the exceptionally early date of 3rd April (JB). There were no further records until 17th April when one was singing in the Reedbed (PM). There was then a gap of nearly a fortnight before there were any more sightings. It appears that cold weather and strong headwinds in Southern Europe and huge sandstorms over the Northern Sahara resulted in many birds including Sedge Warblers being delayed and arriving late on their breeding grounds. On 30th April single birds were singing on the Wet Grassland, in the Reedbed and on the Duck Marsh (PM/BM). On 10th May five were seen at the edge of the Lagoon (JB/MB) and four were seen here during an early morning WeBS count on 20th May. Like last year, at least one pair nested at the Dragonfly Ponds and a bird was singing here from 2nd June. The last sighting at the Dragonfly Ponds was on 13th August. On 14th July two adults and four juveniles were reported at the edge of the Lagoon (JB/MB). A very wet August may have encouraged birds to leave earlier than usual and one by the Lagoon and one on the Wet Grassland on 19th August were the last sightings of the year (WeBS), 12 days earlier than last year.

Reed Warbler *Acrocephalus scirpaceus*
Migrant Breeder

Thoughts that birds breeding in the Reedbed might be put off by work on the fish pass close by proved to be unfounded and three singing there on 4th May were the first of the year (AP). There were no further sightings until 11th May when one was reported singing on the Duck Marsh (PM/BM). Between 16th May and 6th June a bird was reported on several dates at the Dragonfly Ponds in the vicinity of Chadwick Pond (MW). One was singing on the Wet Grassland on 2nd June (PM/BM) and there were several sightings of one at the edge of the Lagoon. A bird there and one on the Wet Grassland on 19th August during an early morning WeBS count were the last

sightings of the year, nearly three weeks later than the last sighting in 2011. There were no reports of juveniles this year. The spread of common reed around the Lagoon, on the Duck Marsh and on the Wet Grassland has given this bird many more potential breeding areas on the reserve.

Blackcap *Sylvia atricapilla* **Migrant Breeder**

There were no reports of over-wintering birds in the early part of the year and a male and female at the edge of Tim's Field on 29th March were probably newly arrived migrants (JB). A female was seen on the path to the Manager's Garden on 1st April (DC/EC). From the 11th April there were sightings most days and birds seemed to be present in particularly good numbers this spring. The Willow Path was probably the best place with three males seen there on 27th April and five males singing in the adjacent coppice on 30th April (PM/BM). Up to three males were also singing round the Lagoon in the early part of May with birds also singing on the riverbank and on the Sludge Lagoon. There were sightings all round the reserve in virtually every habitat. The first juvenile was reported from the Willow Path Hide on 17th June. Birds were still singing in the Willow Coppice and on the riverbank in the last week of July but were hard to find in August. Three juveniles in bushes by the Lagoon and one on the riverbank on 19th August, seen during an early morning WeBS count, looked like being the last of the year, more than five weeks earlier than last year. It may be that birds left much earlier than usual due to the very wet summer. However, there was an unconfirmed report of what were probably three overwintering birds in a bush on the compound banking on 18th November.

Garden Warbler *Sylvia borin* **Migrant Breeder**

A bird in a thick patch of bramble at the side of the Lagoon on 8th May was the first of the spring (PM et al), four days later than the first confirmed sighting last year. There were further sightings here over the next few days. However, typically, the best place to see or hear this species was in the Willow Coppice and two were singing here on 16th May. On 29th May a bird was also singing at the edge of the scrub (PM/BM). The Willow Path continued to produce sightings throughout June and into the first week of July. A bird was also seen in the coppice on 2nd August. There were then no further sightings until 19th August when one was seen in bushes at the back of the

Lagoon during an early morning WeBS count. This was also the last sighting of the year.

Lesser Whitethroat *Sylvia curruca* **Migrant Breeder**

After a better year last year this year too produced a number of records. On 23rd April a bird was giving snatches of song and was seen briefly in the John Ackroyd Meadow hedge near the Dragonfly Ponds (PM), just one day later than last year. The following day what was probably the same bird was singing at the end of the Butterfly Bank, exactly where one was singing last year. A bird continued to sing here up to 11th May. On 15th May one was seen on the fence by the Mike Sheldon Hide (PM/BM). There were then no further reports until 25th June when one was singing in trees on the farmland (PM). One singing briefly in the John Ackroyd Meadow hedge on 30th June was the last record of the year (PM/BM). There were no reports of juveniles and it is uncertain whether breeding actually took place this year.

Common Whitethroat *Sylvia communis* **Migrant Breeder**

It was another successful year for this species but the number of breeding pairs was probably a bit lower than the 15 to 20 estimated over recent years. A bird on the Scrubland on 21st April was the first of the year (JKi), five days later than last year. Numbers were slower to build than last year and only single birds were reported up to 7th May. However, a count on 8th May produced six singing males on the Scrubland and two in the bramble patch across the road from the Lagoon Hide - an area which holds birds every year. According to the BTO cold weather and strong headwinds in Southern Europe and huge sandstorms over the Northern Sahara resulted in some birds, including whitethroats being late arriving on their breeding grounds. With much of the Scrubland hard to monitor it is likely that several more pairs bred on here but nesting certainly also occurred in the coppice, on the Butterfly Bank, around the Lagoon and at the Dragonfly Ponds. Six birds in the John Ackroyd Meadow hedge on 30th June included at least four juveniles (PM/BM). At least two juveniles were on Bentley's Path on 23rd July (PM/BM). A bird seen by the Lagoon on the same date had been ringed (JB). Juveniles were also seen at the edge of the scrub on 26th July and on the Willow Path on 2nd August. Only single birds were reported throughout the rest of August and most appeared to have left by the

end of the month. One on the Scrubland on 2nd September was the last sighting of the year (PC), more than two weeks earlier than last year.

Chiffchaff *Phylloscopus collybita* **Migrant Breeder**

There were no reports of over-wintering birds and one seen in the Willow Coppice on 18th March was the first of the spring (BH). There were daily sightings from 23rd March with birds singing on the Sludge Lagoon, on the riverbank, on the entry road and in the Willow Coppice. By 5th April at least five could be heard singing round the reserve. One bird was still singing in the coppice as late as 8th September. One or two were seen in mixed feeding parties of tits there in August and September. A bird seen on the Willow Path on 21st October was the last sighting of the year (DC/EC), nearly four weeks later than last year.

Willow Warbler *Phylloscopus trochilus* **Migrant Breeder**

A bird singing in the Willow Coppice on 13th April was the first of the spring and two were singing here from 16th (PM/BM). Over the next two weeks birds were also singing on the Sludge Lagoon, by the Lagoon Hide, on the far riverbank opposite the river path, and on the entry road. On 30th April four were in full song in the coppice. Birds were often hard to see in July but contact calls all round the reserve during an early morning WeBS count on 22nd July revealed a good population and hopefully a good breeding season. Juveniles were seen on the Willow Path on a number of dates in August and several were reported in mixed feeding parties of tits. One on the Willow Path on 28th August was the last reported sighting of the year (BM), a month earlier than last year.

Goldcrest *Regulus regulus* **Frequent Visitor**

it was a poor year with just one report of a single bird on the riverbank by the bridge on 7th January (PC).

Spotted Flycatcher *Muscicapa striata* **Scarce Visitor**

There have been no reported sightings in the last two years. 2010 produced two records.

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

There were regular sightings in the early part of the year but numbers were generally disappointing with parties usually consisting of no more than six birds. In January and February last year parties of up to 17 were seen. There was, in fact, just one double figure count, 10 being seen by the Lagoon on 24th February (JB/MB). On 6th March one was observed taking nesting material from the Willow Coppice across to the Lagoon (PM/BM). On 11th March one was again seen in the Willow Coppice with nesting material during an early morning WeBS count. On 26th March one was seen collecting feathers in the Manager's Garden (PM/BM). However, an extremely wet April could well have washed out any early nesting attempts and a single juvenile on the Willow Path on 6th June was the first of the year (MW). There were no further reports of juveniles until 1st August when six birds were seen on the Willow Path (DC/EC). There were more reports of family parties from the middle of August but numbers were again a little disappointing with the biggest group being 10+ by the Lagoon on 19th August. There were regular sightings throughout the autumn and to the end of the year but no observers reported more than eight birds.

Marsh Tit *Poecile palustris* **Scarce Visitor**

There were no sightings this year. Birds were recorded on the reserve in 2002 and 2004.

Willow Tit *Poecile montanus* **Casual Breeder**

This species is now becoming very scarce nationally so we were delighted to have a pair breeding on the reserve last year. This year started promisingly enough with daily sightings in January and February and two birds on several dates. All records came from the Willow Path or Sensory Garden. The latter site was the most productive in the first half of January but the majority of records thereafter came from the Willow Path and Willow Coppice. Unfortunately, sightings came to a sudden halt after 4th March and there was just one other sighting of a single bird in the Manager's Garden on 17th March. There were hopes that birds might return to the feeders in the autumn but this was not the case.

Coal Tit *Periparus ater* **Infrequent Visitor**

Each year has usually produced just two or three records in the Manager's Garden. Last year there was just one sighting in the Sensory Garden. However, this year was by far the best to date with a spate of sightings in the last three months of the year. Two were seen by the river bridge on 3rd March (PC); one was in the Manager's Garden on 7th May (DC/EC) and one visited the feeders in the Sensory Garden on 8th May (JB/MB). There were no further records until 20th October when one was again seen in the Manager's Garden. There were then sightings on three further dates in October with two birds reported on 21st October (JS et al), four dates in November and four dates in December with two on 16th December.

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

A common bird on the reserve and in surrounding woodland. The majority of sightings are on the Willow Path and in the Manager's Garden and Sensory Garden where birds visit the feeders throughout the year. Blue Tits and Great Tits seem to be taking it in turns to use the nest box on the side of the Visitor Centre. In 2010 it was Blue Tits, in 2011 Great Tits and this year Blue Tits again. Visitors were again able to enjoy live images on the television in the centre, from the first nesting material going in on 28th March to seven eggs being laid and six young subsequently fledging. Several nest boxes on the Willow Path were also used by Blue Tits. With the very wet spring and summer many juveniles probably struggled and numbers in mixed feeding parties in August and September were disappointing. Numbers at the feeders in the Manager's Garden in the latter part of the year were also on the low side with usually no more than three birds present.

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

Like the Blue Tit the majority of records come from the Manager's Garden, Sensory Garden and Willow Path. Nest boxes on the Willow Path again proved popular, one pair nesting in the box on the side of the Mike Sheldon hide. The first juvenile was seen in the Manager's Garden on 5th June with three in the Sensory Garden on 16th June. Numbers at the feeders in the latter part of the year were a little lower than last year, suggesting that breeding success had been affected by the very wet summer.

Nuthatch *Sitta europaea* **Scarce Visitor**

After four blank years there were sightings on two dates in January last year. This year there was a report of a single bird just off the reserve at the bottom end of the Scrubland on 21st September (JK).

Treecreeper *Certhia familiaris* **Casual breeder**

2012 was undoubtedly the best year yet for this species with sightings on 11 dates between 9th January and 4th May. All sightings bar one were on the riverbank, two birds being seen in the car park close to the riverbank on 29th February (PH). Most sightings were in the vicinity of the river bridge with two birds observed nest building in a crack in the stonework at the side of the bridge on 22nd March (PC et al). One was seen visiting the nest site on 14th April (JH) but there were no subsequent reports of juveniles. There was just one record in the second half of the year - a single bird in the Manager's Garden on 16th December (JB/DAN et al).

Jay *Garrulus glandarius* **Resident Breeder**

A common bird on the reserve and recorded almost daily throughout the year. Most records involved between one and three birds but four were on the Willow Path on 8th February (BH); four were in the Willow Coppice and five on the scrubland during an early morning WeBS survey on 11th March; four were on the Willow Path on 11th April and five flew over the Duck Marsh on the same date. A juvenile was seen on the Willow Path on 13th June (JB/MB). Four flew into the coppice during another WeBS survey on 24th June and four were in the car park on 11th August (NT). There was a further report of four birds on the entry road on 19th August. A Jay was pursued by two Swallows over the farmland on 14th August (PM/BM). The last three months of the year are always a time of intense Jay activity and this year was no exception with daily sightings all round the reserve, the Willow Path being particularly productive.

Magpie *Pica pica* **Resident Breeder**

This remains a common bird on the reserve though numbers have fallen over recent years. The highest daily count reported was just 14. The biggest single gathering was of 12 birds on Tim's Field on 21st October (DC/EC).

Jackdaw *Corvus monedula* **Resident Breeder**

This remains a very common bird on the reserve. A few visited the Manager's Garden daily but up to 50 were reported on the farmland in the early part of the year. Last year produced counts of around 400 birds and, whilst there were no reports of anything like this number this year, there has almost certainly been no real decline in the local population. Around 70 were reported in trees on the entry road during the evening on 12th and 13th June (PM/BM). Six juveniles were in the Manager's Garden on 23rd June (DC/EC). Around 70 were over the Manager's Garden on 22nd July (PM/BM); 100+ were on the freshly cut farmland on 23rd July (PM/BM) and c80 flew over the Lagoon at dusk on 29th November (PM/BM). There were several reports of around 80 birds on the farmland in December.

Rook *Corvus frugilegus* **Scarce Visitor**

There had been no sightings since 2009 and with no known rookeries in the immediate area round the reserve a flock of 30 birds on Tim's Field during the evening on 31st March came as a bit of a surprise (JB/MB). There was also a report of two flying over the farmland on 16th December (JC). There were no other sightings.

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

This is a very common bird on the reserve and adjacent farmland. Some of the bigger counts were on the farmland with 85 on 25th July and 60 on 17th September (PM/BM). Up to 50 assembled on the Duck Marsh later in the day in December and more than 100 flew into woodland on the far side of the river at dusk most evenings towards the end of the year.

Starling *Sturnus vulgaris* **Casual Breeder**

Numbers in the first three months of the year were very disappointing with the best count just 22 on the farmland on 25th January. Up to 40 were seen on the farmland in April and on 26th May 102 were counted with 120 the following day (PM/BM). Around 120 flew over the Willow Coppice on 4th June and c70 came out of the coppice during the evening on 8th June (PM/BM). There were two counts of 40+ in August but c300 over the Lagoon at dusk on 28th October (PM/JB) was by far the highest count of the year. Further dusk checks failed to produce birds in any numbers. November was very disappointing with the best count just 37 on the farmland on 18th.

There was no improvement in December with 25 in trees in the Manager's Garden on 22nd the highest (DC/EC).

House Sparrow *Passer domesticus* **Casual Breeder**

This species had been recorded on the reserve in each of the nine years prior to 2010. However, 2010 produced no sightings and there were just two in 2011. There were no records again this year.

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

It was another successful year for this species with the added bonus of at least one pair staying to breed. There were daily sightings in the Manager's Garden from the beginning of the year to 28th March with up to 10 birds reported in January, 11 on 25th February (DC/EC) with numbers starting to fall away in March and no more than five reported. On 28th March one was observed investigating an old nest box that had been enlarged by a woodpecker at the back of the Manager's Garden. In April and May one or two birds were at the feeders in the Manager's Garden and Sensory Garden some days and on 6th May one was seen gathering nesting material in the Manager's Garden (DC/EC). Three were at the feeders in the Sensory Garden on 20th May and 2nd June (DC/EC). There were no sightings for several weeks after 20th June but on 3rd August an adult was seen feeding two juveniles under the feeders in the Sensory Garden (PM/BM). There were further visits with the juveniles over the following days and one or two birds continued to visit the feeders throughout September. Birds started to return to the feeders in the Manager's Garden from 6th October with up to four reported here and in the Sensory Garden. However, the expected increase in numbers did not happen this year. No more than two were reported in November and sightings suddenly dried up after 24th. There were no sightings in December.

Chaffinch *Fringilla coelebs* **Frequent Visitor**

Birds are daily visitors to the feeders in the Manager's Garden for much of the year, being absent only in April, May and the first half of June. Numbers in the early part of the year were rather lower than last year with no double figure counts reported. Most days produced between two and five birds but seven males (and no females) were present on 2nd January (PM/BM) and seven birds were reported on 17th January. By way of comparison there were several double figure

counts in January and February last year with 15 on one date. A bird was singing on the river bank near the bridge on 26th March and one was singing on the entry road on 5th June but there were few other reports away from the Manager's Garden. There were no sightings in the Manager's Garden in April, just a single bird on one date in May and no reports in June until 23rd. Thereafter between one and four were present daily. Six were counted on a couple of dates in August. Up to seven were reported in October, six in November and seven in December. Unusually, one or two birds also started to visit the feeders in the Sensory Garden in December.

Brambling *Fringilla montifringilla* **Winter Visitor**

There was only one reported sighting this year - a single bird in the Manager's Garden on 20th October (JC).

Greenfinch *Chloris chloris* **Resident Breeder**

Numbers do tend to fluctuate from year to year due to the disease Trichomonosis but up to 18 were counted at the feeders in the Manager's Garden in January and 25 were in the trees there on 12th February (DC/EC). Apart from a few birds visiting the feeders in the Sensory Garden practically all sightings were in the Manager's Garden in the first five months of the year, numbers typically falling away somewhat from the beginning of April. The first two juveniles of the year were seen there on 30th May (BM/MB), two weeks earlier than last year. Numbers reported in July and August were mainly in single figures but 10 were at the feeders in the Manager's Garden on 12th August (DC/EC). There were several double figure counts in September last year but there was just one this year, 16 being counted at the feeders on 19th (DC/EC). Numbers in the remainder of the autumn were lower than last year with none reported on Tim's Field and only one double figure count of 14 birds on 7th November (DC/EC) in the Manager's Garden. In December 12 were reported on the feeders there on three dates.

Goldfinch *Carduelis carduelis* **Resident Breeder**

A few birds were observed feeding on alder seeds in roadside trees by the Lagoon in January but the majority of sightings in the first few months of the year were in the Sensory Garden where they were daily visitors to the seed feeders. Most reports were of between one and eight birds with 10 on the farmland on 15th February the highest.

The first juvenile of the year was seen in the Sensory Garden on 7th June, some three weeks earlier than last year. Numbers started to build up from the middle of July with the first 20+ count on the John Ackroyd Meadow on 19th July. Around 60 birds were reported on the Butterfly Bank on 31st July (JB) and there was a similar count on John Ackroyd Meadow the next day (DW). More than 50 were seen on overhead wires near the radio mast on 10th August (PM). Numbers at the feeders in the Sensory Garden built up rapidly from the middle of August with daily double figure counts including many juveniles. Among the highest were 25 on 15th September (PS) and 21 on 22nd September (DC/EC) with several observers reporting around 20. Teasel seed heads proved popular in November with 26 counted on seed heads by the Dipping Pond on 20th November (JB) and smaller numbers visiting the teasels in the Sensory Garden. On 25th December at least 20 were reported on the entry road near the main gates (PM/BM).

Siskin *Carduelis spinus* **Infrequent Visitor**

This is very much a winter visitor to the reserve with birds coming to feed on alder seed in roadside trees by the Lagoon. There were sightings on seven dates this year, five of these between 8th January and 12th February. Most sightings involved one or two birds but c12 were reported on 8th January (DE) and six on 18th January (BH). In the latter part of the year there was one sighting of a single bird on 14th October during an early morning WeBS count and on 24th December seven were feeding on alder seed in roadside trees (JB).

Linnet *Carduelis cannabina* **Casual Breeder**

With more than 200 birds on the reserve towards the end of last year it was looking encouraging for the start of 2012. There were indeed some impressive counts in January with c150 over the Manager's Garden on 6th; 112 in one tree on the Butterfly Bank on 13th; 184 in one tree in the John Ackroyd Meadow hedgerow on 15th and c150 over Tim's Field on 16th (PM et al). February, however, was to produce some amazing counts. More than 300 were on Tim's Field on 4th (JB); 200+ were on the Mike Fisk Meadow on the same date and 150 were in trees at the Manager's Garden on 6th. On 10th February a flock photographed over Tim's Field was found to contain 597 Linnets (BM), a truly astonishing figure these days. There were further 200+ counts in February but these were almost certainly under

estimates. A bumper crop of fodder radish, sown in 2011, brought the birds in to feed on the seed. Quinoa had been the main attraction in the past but this proved very disappointing this year with very few plants to be seen. Numbers inevitably fell away after the middle of February with most counts thereafter being of 50 birds or less. The field was cut on 26th March in preparation for ploughing but birds continued to visit with c70 reported on 31st March (JB/MB). On 5th April a noisy flock of c100 was in trees at the edge of the coppice (PM/BM). A bird was singing on the Butterfly Bank on 18th March, in the Mike Fisk Meadow hedgerow on 11th April and on the Butterfly Bank again on 22nd April and hopes were high that at least one pair might stay to nest, as subsequently proved to be the case. The last sighting of the spring was on 28th April when 35 birds were on Tim's Field (DC/EC). There were no further sightings until 18th July when two birds were reported on the John Ackroyd Meadow but on 2nd August a juvenile was seen on a metal barrier near the Dipping Ponds (PM/BM). A male and female were on overhead wires near the radio mast on 19th August and on 31st August a male and two juveniles were on the same overhead wires and later on a metal barrier by the Visitor Centre (PM/BM). The quinoa crop failed again this year and the new fodder radish crop was nothing like as abundant as last year but a few linnets started to return in September. However, numbers were well down on the previous autumn with no more than 50 in October and then only on some days. Numbers did reach an estimated 80 on 18th November and there were regular reports of 50+ birds thereafter. A flock photographed on Tim's Field on 5th December was found to include 68 birds (BM) and 78 were counted on John Ackroyd Meadow on 12th December (DC/EC).

Lesser Redpoll *Carduelis cabaret* **Scarce Visitor**

There were four records this year. Two were seen in the Manager's Garden on 14th November (DC/EC); four were there on 20th November (DC/EC); two were seen on the Willow Path on 2nd December (JH) and one was in alders near the car park on 8th December (PC).

Bullfinch *Pyrrhula pyrrhula* **Resident Breeder**

Recorded daily from the beginning of the year to the end of August, there was a quiet period in September with just two records but birds

were then again seen regularly to the end of the year. Typically, the large majority of records came from three sites - the Manager's Garden, the Sensory Garden and the Willow Path. The Sensory Garden was particularly productive from the beginning of the year to the end of May with up to two males and two females visiting the feeders most days. There were rather fewer sightings here from the beginning of June but daily sightings thereafter in the Manager's Garden. Four males and a female were seen here on 9th June (DC/EC) and three males and three juveniles on 17th June (DC/EC). Two adults and three juveniles were on the Willow Path on 11th July (JB/MB). There were subsequent reports of single juveniles in the Manager's Garden and on the Willow Path over the following weeks. After a very quiet September birds started to be seen again from the beginning of October and there were daily sightings thereafter to the end of the year. Most sightings involved up to three birds but on 14th November a male and four females were in the Manager's Garden (DC/EC); two males and two females were there on 25th November (DC/EC); a male and three females were on the Willow Path on 12th December (JH); two males and two females were in the Sensory Garden on 26th December (DC/EC) and three males and a female were there on 30th December (GJB).

Yellowhammer *Emberiza citronella* **Scarce Visitor**

This is still a scarce bird in the area and there were no sightings this year. In 2010 there were three February records and in 2011 one February record and one March record - all in the Manager's Garden.

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

Numbers visiting the feeders in the Manager's Garden in the early part of the year were lower than last year when up to 18 birds were recorded with double figure counts most days. Up to nine were reported in January and February this year with no more than five in March. Birds were also regular visitors to the feeders in the Sensory Garden with up to four seen here. One was singing on the Wet Grassland as early as 12th February but there were few other sightings on the wetlands in the first three months of the year. Like last year, at least one pair nested at the Dragonfly Ponds, a female being observed taking food to a nest in the long vegetation at the back of Chadwick Pond from 6th June. Birds certainly nested on all

four wetland areas again, the first juvenile being seen on the Duck Marsh on 17th June. On 16th July a stunned juvenile was found outside the Visitor Centre, having presumably flown into the glass door. Three juveniles were seen in riverside trees by the Wet Grassland during an early morning WeBS count on 19th August. There were occasional visits to the feeders in the Manager's Garden and Sensory Garden throughout the summer months but activity started to build up from the beginning of October with daily sightings in the Manager's Garden. However, numbers remained low with no more than five reported there and no more than three in the Sensory Garden. A ringed male was photographed in the Manager's Garden on 1st December (PD) and what was probably the same bird was seen in the Sensory Garden on 25th December.

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

Bar-headed Goose (Escape)
Corn Bunting
Grey Phalarope
Marbled Duck (Probable escape)
Red-crested Pochard (Probable escape)
Ringed Teal (Escape)
Rose-ringed Parakeet (Escape)
Sandwich Tern
Scaup
Short-eared Owl
Twite

ESCAPED SPECIES SEEN THIS YEAR

Black Swan *Cygnus atratus* **Escaped Species**

One that flew over the Lagoon on 2nd July 2011 was the first sighting since 2005. This year a single bird was on the Lagoon on 24th April, 26th April, 27th April and 11th May (JK/SHe et al). What was almost certainly the same bird was on the canal near the entrance to the reserve on 13th June (PM/BM).

FIRST AND LAST DATES FOR WINTER VISITORS 2012

SPECIES	LAST	FIRST
Wigeon	26th February	16th September
Goldeneye	18th March	11th November
Waxwing	-	9th December
Fieldfare	18th April	27th October
Redwing	14th April	13th October
Brambling	-	27th October

FIRST AND LAST DATES FOR SUMMER VISITORS 2012

SPECIES	FIRST	LAST
Garganey	-	-
Hobby	7th July	7th July
Honey Buzzard	13th June	13th June
Osprey	-	-
Ringed Plover	-	-
Little (Ringed) Plover	-	-
Whimbrel	-	-
Common Sandpiper	26th April	1st September
Common Tern	18th April	24th July
Arctic Tern	19th May	19th May
Cuckoo	19th July	25th July
Swift	26th April	3rd September
Sand Martin	28th March	18th September
Swallow	3rd April	29th September
House Martin	7th April	23rd September
Yellow Wagtail	-	-
Whinchat	8th May	26th September
Wheatear	19th May	19th September
Grasshopper Warbler	26th April	9th June
Sedge Warbler	3rd April	19th August
Reed Warbler	4th May	19th August
Garden Warbler	8th May	19th August
Common Whitethroat	21st April	2nd September
Lesser Whitethroat	23rd April	30th June
Willow Warbler	13th April	28th August
Spotted Flycatcher	-	-
Common Redstart	1st September	1st September

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

MAMMALS



Fox *Vulpes vulpes*

There were rather more records in the first six months of the year than the last six. There were numerous sightings in the same area of the Willow Coppice between 16th January and 21st February with two animals on one date. On two occasions one was seen asleep. On 28th April two different animals were reported - one on the entry road and "Stumpy", the large male with the very short tail, on the John Ackroyd Meadow (JC). Stumpy has been seen on the reserve for the last four years and is obviously very distinctive. Stumpy was seen on two further occasions - on the river path on 16th May (PM/BM) and on the road by the Lagoon on 17th September (PM/BM). There were only eight reported

sightings in the last six months of the year but there was regular evidence of their presence in the form of footprints all round the reserve.

Otter *Lutra lutra*

The area around the weir has usually been one of the best places for finding evidence of otters at Rodley. Unfortunately, work on the fish pass from April to the end of November prevented access to the area during this period. However, evidence of their presence was found on a number of occasions in the first six months of the year and there were reported daylight sightings.



On 9th January fresh footprints were found on the riverbank by the bridge and spraint was discovered by the water inlet on the Lagoon (JB). On 6th February otter tracks were found in the snow at the edge of the weir (JB). Daylight sightings are always treated with caution since, despite the size difference, otters can be confused with mink when in the water. On 30th May a visitor reported seeing an otter - "definitely not a mink" - on one of the islands on the Lagoon. On 7th June terns were watched hovering over a mammal swimming between the three islands on the Lagoon. The animal spent much of

the time under water, raising its head occasionally and its broad tail as it dived. The observer, an experienced naturalist, described it as "quite a small otter". Just a week later on 13th June terns were again observed hovering over what appeared to be an otter as it swam from the middle island to the bottom island at 3.15pm. However, from further evidence that emerged in July and in January 2013 it is likely that at least one of these sightings related to a very large female mink. Long vegetation on the riverbank in the summer months makes surveys very difficult and the very wet summer this year made access almost impossible.

American Mink *Neovison vison*

There was regular evidence of their presence in the form of footprints, two regular sites being the fish pass area and the riverbank under the bridge. One was seen on the Lagoon on 22nd February (PA) and on the far bank of the river on 18th March. On 28th March what was probably the same animal was seen on the Duck Marsh in the morning and on the Lagoon in the afternoon.



There were further sightings on the river path on 2nd May (GJB), on the road by the bridge on 29th May (SHe) and on the Kingfisher Pool on 27th June. On 4th July one was observed taking eggs from the middle island on the Lagoon to the bottom island (DC/EC). One observer reported seven visits to the middle island, on each occasion the mink returning with what was almost certainly a tufted duck egg. Examination of the artificial otter holt on the bottom island the following day revealed two juvenile mink, numerous egg shells and several dead waterfowl. There were no further sightings until 16th December when one was photographed swimming in the Education Pond.

Weasel *Mustela nivalis*

There were 50 reported sightings this year (43 last year) and many more sightings almost certainly went unreported. As always there were many sightings around the Visitor Centre. On 15th January one was seen and photographed on the Willow Path carrying a frog which it had caught in the base of the dead hedge (AH). Other records came from the Manager's Garden, Willow Coppice, Wet Grassland, Duck



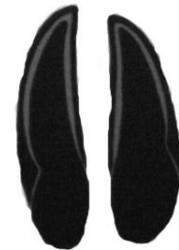
Marsh, Education Pond, the river bridge, the river path and the edge of Tim's Field. Among some of the more interesting ones, an adult and juvenile were seen on the road near the Visitor Centre on 16th July (JB) and on the same date an adult was seen carrying a vole in the same area (BM). On 29th July one was seen swimming across the fish pass (BM/JB/MB). On 1st August three were reported on the path at the edge of Tim's Field by the coppice gate. On 7th September one killed a magpie at the edge of the farmland near the dry stone wall (JB/MB). On 26th September one was watched dragging a vole into a hole under the Visitor Centre (GJB). Two were seen in the Sensory Garden on 12th December (DC).

Stoat *Mustela erminea*

Much less common on the reserve than its smaller relative, Stoats were recorded on just two dates this year. There were sightings of a single animal on the road near the Visitor Centre on 11th August (JC) and on the Willow Path on 15th August (ABI).

Roe Deer *Capreolus capreolus*

This is a common mammal along the valley. Sightings were reported on 56 dates and in all months except September, the large majority of sightings coming in the first six months of the year. Most records were of one or two animals but four were on the Duck Marsh on 4th February (JC); four were seen on the Scrubland on 12th February during an early morning survey and four crossed Tim's Field on 2nd June (PA). On 6th June a female and fawn were seen on the Duck Marsh (MW). They are certainly good swimmers and on 9th June there was a report of one swimming across the Lagoon. On 23rd June a male, female and two juveniles were disturbed on the Scrubland during Himalayan balsam removal and on 19th August a male and two juveniles were seen on the farmland early in the day. There were no sightings for several weeks after 19th August but October and November provided a few records with up to four seen. Four were again seen on 8th December on the Scrubland and five were reported there on 12th December (JC). Four were also seen on the far bank of the Lagoon at dusk on 13th December (PM/BM).



Mole *Talpa europaea*

There was ample evidence of the presence of this small mammal throughout the year in the form of mole hills all round the reserve. There were no reports of dead moles this year.

Common Shrew *Sorex araneus*

Almost certainly much more common on the reserve than the few records suggest. On 14th January one was found under the mini-beast trap at the Manager's Garden (PA). Dead shrews are found most years and this year was no exception. One was found dead in the Lagoon Hide on 7th June (PM) and on 19th June one was found dead by the Mike Sheldon Hide (DAN). On 8th September one was caught in a Longworth trap by the dry stone wall during a small mammal survey (JB).



Water Shrew *Neomys fodiens*

Survey work carried out in 2004, 2005 and 2009 using bait tubes showed that this species was present within the reedbed area of the reserve - but there had been no sightings of this elusive little mammal prior to 2009 when one was found dead on the back Reedbed and there was an unconfirmed sighting of one at the edge of the Lagoon on the same date. In 2010 what was described as an especially fine specimen was caught in a Longworth trap in the Reedbed during a small mammal survey run by the Yorkshire Mammal Group on 17th July. There were no records in 2011 but this year there was one sighting of an individual at the edge of the Lagoon on 15th June (JB).

House Mouse *Mus musculus*

There were no records this year. Mice found in the workshop or seed store invariably turn out to be wood mice.

Wood Mouse *Apodemus sylvaticus*

This is a common mammal on the reserve, a number being caught in Longworth traps during small mammal surveys. Four were caught on 5th June, 11 on 9th June, three on 20th July, two on 4th August and two on 8th September - see separate report for more details. Several are often found in bird nest boxes during the winter months. Surprisingly, other than a report of six under a bench by the river on 20th April (DW), there were no other sightings this year.

Bank Vole *Clethrionomys glareolus*

This is a very common mammal on the reserve most years, often being seen under the feeders in the Sensory Garden and Manager's Garden. Typically, it was the most common small mammal caught in Longworth traps during surveys, 14 being caught during one survey on 8th September - see separate report for full details. On 10th December one was observed collecting cotoneaster berries under the bush by the front door to the Visitor Centre (JB).

Field or Short-tailed Vole *Microtus agrestis*

This species rarely ventures into Longworth traps so it is difficult to assess how common it really is on the reserve. However, it is probably the main prey item for the resident kestrels. The fact that the kestrels failed to breed this year may indicate a drop in the number of field voles or it may just be down to the fact that the particularly long vegetation due to the exceptional amount of rain made hunting much harder. There were no reported sightings this year.

Brown Rat *Rattus norvegicus*

This species is surprisingly uncommon on the reserve with just a few records on surveillance cameras on the riverbank over recent years. However, there was a spate of sightings in the Manager's Garden this year. One was seen under the feeders here on 22nd July but from 3rd November to 2nd December there were regular sightings with usually just one animal but three on 25th November and five on 2nd December including several juveniles (DC/EC). There was one further report of a single animal on 15th December (JC). There was only one other record, one being seen at the edge of the Lagoon on 29th October (JB/MB).

Grey Squirrel *Sciurus carolinensis*

There were sightings in the Manager's Garden on eight dates in January with two on two dates and three on 13th. There were no other records until 20th April when one was on the entry road. There were further sightings in the Manager's Garden on one date in May, three dates in June and two dates in September. In June there were also reports of single animals on the river bridge and in the Sensory Garden. One on the entry road on 1st November was the last record of the year.

Rabbit *Oryctogalus cuniculus*

This has always been a scarce mammal on the reserve and there have been no sightings since 28th October 2011.

Hedgehog *Erinaceus europaeus*

There have been no reported sightings in the last four years. One on the bridge on 23rd July 2008 was, amazingly, only the second ever record for the reserve.

Pipistrelle Bat *Pipistrellus pipistrellus*

The commonest bat on the reserve, it was recorded in good numbers during the two organised Bat Nights on 21st July and 11th August. It appeared to be particularly numerous on the Willow Path and especially around the Duck Marsh Hide. There were regular sightings in the summer months round the Visitor Centre during the evening and there were two late records this year. One was seen low over the road in car headlights on 11th November at 5.00pm (JB/MB) and two were seen on the Willow Path at 5.05pm on 14th November (JB).

Noctule Bat *Nyctalus noctula*

Emerging rather earlier than the pipistrelle, several were seen over the wetlands and Tim's Field during the two Bat Nights on 21st July and 11th August. There were few opportunities to carry out further surveys due to adverse weather conditions but it was described as numerous over the Dragonfly Ponds and Wet Grassland at 9.15pm on 8th August (PM/BM). There were no other records.

Daubenton's Bat *Myotis daubentoni*

This species was first recorded in 2006 and then again in 2007. There have been no records in the last five years but the species is almost certainly still present.

We are grateful to Diane Gregory for again leading two very enjoyable bat walks this year.

SMALL MAMMAL SURVEYS

Several surveys were again carried out this year using Longworth live traps. The results are shown below.

Date of Survey: 5th June 2012

15 Longworth traps set in two different habitats.

Dry stone wall - 6 traps - 4 successful

Woodmouse	3♂
Woodmouse	1♀

Willow Path - 9 traps - none successful

Date of Survey: 9th June 2012 (Springwatch Event)

19 Longworth traps set in four different habitats

Sensory Garden - 1 trap - successful

Woodmouse	1♀
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Willow Path - 12 traps - 10 successful

Woodmouse	4♂
Woodmouse (Juvenile)	2♀
Bank Vole	4♂

Willow Coppice Log Store - 1 trap - not successful

Path to Manager's Garden - 5 traps - all successful

Woodmouse	3♂
Woodmouse	2♀

Date of Survey: 20th July 2012

8 Longworth traps set round the edge of the Lagoon - 3 successful

Woodmouse	3♂
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Date of Survey: 4th August 2012 (Public Event)

20 Longworth traps set in three different habitats

Dry stone wall - 5 traps - 3 successful

Woodmouse	1♂
Woodmouse	1♀
Bank Vole	1♂

Sensory Garden - 2 traps - Neither successful

Willow Path - 13 traps - 6 successful

Bank Vole	4♂
Bank Vole	2♀

Date of Survey: 8th September 2012 (Public Event)

20 Longworth traps and 6 Trip Traps set in three different habitats

Dry stone wall - 9 traps - 6 successful

Bank Vole	2♂
Bank Vole (Juvenile)	1♂
Bank Vole	1♀
Common Shrew	1
Toad !	1

Willow Path - 11 traps - all successful

Bank Vole	7 ♂
Bank Vole	2 ♀
Woodmouse	2 ♂

Edge of Tim's Field and Mike Fisk Meadow Hedge - 6 Trip Traps - 1 successful

Bank Vole	1 ♂
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AMPHIBIANS

Smooth Newt *Triturus vulgaris*

A common species on the reserve and particularly easy to see at the Dragonfly Ponds in the spring. Four seen there on 21st March were the first of the year (DC/EC). There were then regular sightings throughout the spring and summer, the bridge over the long ditch being a good place to see these creatures. However, in the absence of any organised amphibian surveys this year there were no big counts. Several were also reported under the mini-beast trap at the Manager's Garden in the summer months.

Palmate Newt

Present in very small numbers, this species was first recorded on 12th May 2010 when a male was found in one of the Dragonfly Ponds. In 2011 two females were recorded during surveys in May. There were no records this year.

Common Frog *Rana temporaria*

Present in good numbers in the Dragonfly Ponds during the breeding season and in the ditches on the Wet Grassland. The first spawn was reported at the ponds on 3rd March (JK/DC/EC), seven days earlier than last year. There were some very early records of adults. One was disturbed in the small pond in the Manager's Garden on 6th January (JB/MB). On 15th January one was caught and killed by a weasel in the dead hedge on the Willow Path in very frosty conditions

(AH) and on 18th February one was seen crossing the road en route for the Lagoon (DC/EC). Young frogs were present in good numbers on the Willow Path, Wet Grassland and at the ponds from the middle of June.

Common Toad *Bufo bufo*

Two on the river path on 11th March (JC) were the first of the year, six days earlier than last year. On 15th March they were present in good numbers on the paths at the Dragonfly Ponds with many in tandem. The first spawn was noted in Scarborough Pond on 22nd March (JK). On 27th March 20 adults were counted in the Pebble Beach Pond and 24 in Scarborough Pond with spawn seen in the long ditch (PJM). There were numerous records throughout the spring and summer months, the mini-beast trap by the Manager's Garden being a popular refuge later in the year.

BUTTERFLIES

A poor spring followed by the wettest summer in more than a hundred years was certainly not what we needed for a successful butterfly year. Some species certainly struggled but others had quite a good year by Rodley standards despite the weather. It all started off quite well with high pressure dominating for much of March and plenty of sunshine in the latter part of the month bringing out the first overwintered butterflies. Peacocks and small tortoiseshells were the first to appear with the odd small white.

In sharp contrast, April was the wettest since records began and with few rain-free days and sunshine in short supply it proved to be a difficult month for butterflies. Much of May too was disappointing with chilly north easterly and north westerly winds a feature in the first three weeks. However, there was a distinct improvement in the latter part of May with some warm, sunny days bringing out butterflies in good numbers.

The Butterfly Bank should be a prime place for butterflies on the reserve with its south facing aspect but over recent years it had become dominated by strong growing grasses, gorse and broom. Volunteers carried out a large amount of clearance work towards the end of last year and areas were sown with yellow rattle and planted with a range of wild flower species. It soon proved its value with orange tips with up to eight seen here. This species had a particularly good year despite the weather. Among the other Pieridae brimstones remained elusive with sightings on just one date and records of green-veined white were well down. Tim's Field is undoubtedly the place to see both green-veined and small whites and there were estimates of more than 100 white butterflies there some days in July and August, the large majority of which were small whites.

Blue butterflies had another poor year and the common blue shows no signs of expanding its population. There was just one record of a single common blue this year. Birds-foot trefoil, one of the main larval food plants, is now becoming much more common on the reserve and further planting has been done on the Butterfly Bank but it is clear that providing the right food plants is not the whole answer to the problem. However, our other Lycaenidae species, the mall copper, had perhaps its best year ever with a record count of 13 one day. There seem to be two hotspots for this species - the John Ackroyd Meadow/Butterfly Bank and the path between Tim's Field

and the Willow Coppice. Marjoram has been introduced to the Butterfly Bank and this proved to be one of the most frequently used plants for this species.

Both large and small skippers had a reasonable year with a good number of sightings, albeit still in fairly low numbers.

Among the immigrants red admirals were late appearing and were only seen in very small numbers. The odd painted lady did appear on the buddleias some days after a blank year in 2011.

As regards the Satyridae, speckled wood held its own with numbers very similar to last year. Gatekeeper had a rather better year with far more sightings than the previous year but numbers remain very low. Numbers of meadow browns were again generally low with few double figure counts and whilst the number of sightings of ringlet was rather higher than last year actual numbers of butterflies reported were generally disappointing. On the bright side, a wall brown photographed near the river seat on 5th September was the first since 2007.

Buddleias, of course, are not native and they have their critics, mainly because of their habit of self seeding. The old Barkers site near the reserve entrance is a good example of this. However, they are without doubt a wonderful butterfly plant. Our policy of delaying pruning until late March or April is certainly paying dividends as the bushes then flower in August when the main emergence of summer butterflies occurs. This year was a classic example with good numbers of small tortoiseshells and peacocks on the buddleias outside the Visitor Centre, on the Butterfly Bank and by the Mike Sheldon Hide. Both species had good years considering the very wet summer and peacocks have bounced right back after a very poor summer emergence in 2011. The other member of this family, the comma, had another poor year with low numbers.

HESPERIDAE

Small Skipper (*Thymelicus sylvestris*)

The skippers have certainly been under-recorded in the past and last year there were just two sightings of small skipper. There was a considerable improvement this year though with numerous reports from 5th July. There were sightings of single butterflies on John Ackroyd Meadow, the Butterfly Bank, Willow Path, Duck Marsh, river path, edge of Tim's Field and the Dragonfly Ponds but up to five were reported around the Lagoon. One at the Dragonfly Ponds on 22nd August was the last of the year (DA).

Large Skipper (*Ochlodes venatus*)

There were again a good number of sightings with one on the John Ackroyd Meadow (JS) and two on the river path by the Dragonfly Ponds (BH) on 4th July the first of the year. Most records came from the John Ackroyd Meadow and four here on 11th July (PM/BM) was the best count of the year. One on the Mike Fisk Meadow on 30th July was the last of the year.

PIERIDAE

Brimstone (*Gonepteryx rhamni*)

Despite a good amount of alder buckthorn on the Butterfly Bank this remains a scarce butterfly on the reserve. There were four records this year but all on the same date, suggesting a single butterfly. On 23rd May there were sightings at the Dragonfly Ponds and on the Butterfly Bank (TP), on the Wet Grassland (JB/PS) and in the car park (RF).

Large White (*Pieris brassicae*)

All records were of single butterflies and there were only 13 reported sightings in total. One on the Butterfly Bank on 2nd May was the first of the spring (TP), 15 days later than last year. There were no further sightings until 23rd May when one was on the Willow Path. One at the side of the entry road on 1st October was the last of the year (JB/MB).

Small White (*Artogeia rapae*)

The biggest numbers are always to be found on Tim's Field and one here on 27th March was the first of the spring (PM/BM), exactly the same date as last year. There were regular sightings thereafter with up to 11 reported. Numbers on Tim's Field started to build in July with several double figure counts and 100+ estimated to be there some days including green-veined whites. One on John Ackroyd Meadow on 29th September was the last reported sighting of the year (DC/EC).

Green-veined White (*Artogeia napi*)

It was a poor year as regards numbers of sightings and numbers of butterflies reported but it is likely that numbers of butterflies in particular were under-recorded, many probably being dismissed as small whites. One on the Reedbed and one on the Willow Path on 27th April were the first of the year (PM/BM), two days earlier than last year. There were no reports of more than five butterflies until 27th July when 20+ were counted on Tim's Field. It is likely that true numbers were rather higher in July and August with more than 100 white butterflies on the field some days but usually seen at some range. One on buddleias on the Butterfly Bank on 6th September was the last reported sighting of the year (PM/BM).

Orange Tip (*Anthocharis cardamines*)

A male near the edge of the Lagoon on 29th March (JB) was the first of the year, some 12 days earlier than last year. Unfortunately, the wettest April since records began saw sightings on just four dates in what would normally be a busy month but May turned out to be perhaps the best ever for this species in terms of numbers seen. The highest daily count on the reserve was 15 on 29th May (PM/BM). Habitat management work on the Butterfly Bank the previous winter certainly paid off with regular sightings here and a report of eight males on 29th May (PM/BM). Up to five were seen in the same area in the early part of June. A female was photographed on sweet rocket at the Dragonfly Ponds in wet conditions on 7th June (DA) but a single male on the Butterfly Bank on 12th June turned out to be the last sighting of the year, some three weeks later than last year.

LYCAENIDAE

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

There were no sightings this year. There has been just one sighting on the reserve and that was in the Sensory Garden on 19th July 2006.

Small Copper (*Lycaena phlaeas*)

After two better years in 2010 and 2011 this year was probably the best ever for this species, certainly as regards numbers seen. The first sighting of the year came on 30th April with three at the edge of the Lagoon and one near the Visitor Centre (JB/MB). From 16th May to 18th June there were sightings on the John Ackroyd Meadow, at the edge of Tim's Field and in the car park of one and sometimes two butterflies. A freshly emerged specimen at the edge of Tim's Field on 13th August was the first of the summer brood and there were regular sightings thereafter both here and on the Butterfly Bank. This is a very variable species with many described aberrations, several of which occur regularly. At Rodley the blue-spotted form turns up from time to time and one was reported on scentless mayweed at the edge of Tim's Field on 16th August (PM/BM). Marjoram proved a popular food source on the Butterfly bank with regular sightings on this plant. A count of 13 on 28th August was exceptional for Rodley, four of these on the Butterfly Bank, eight at the edge of Tim's Field and one on Bentley's Path (PM/BM). Three butterflies on marjoram on the Butterfly Bank on 31st August included another example of the blue-spotted form (PM/BM). One on the John Ackroyd Meadow on 3rd October was the last of the year (JS).

Common Blue (*Polyommatus icarus*)

The last three years have each produced just one reported sighting of this species and it was to be the same again this year. A single butterfly was recorded on the John Ackroyd Meadow on 26th May and the underwing photographed for verification (PM/BM). Whilst Birds-foot trefoil, one of the main larval food plants, is now well established on the Mike Fisk Meadow more planting and seeding was done on the Butterfly Bank last winter and this is now doing well. Hopefully, common blue numbers will increase here in the future.

Holly Blue (*Celastrina argiolus*)

After just two reported sightings in the last three years, two records this year was an improvement. One was reported at the Dragonfly Ponds on 16th August and one was seen in the Willow Coppice on 28th August (PM/BM).

NYMPHALIDAE

Red Admiral (*Vanessa atalanta*)

We had to wait until 1st July for the first sighting of this annual immigrant from the Mediterranean region - a single butterfly near the Visitor Centre (PC). Sightings were reported on eight further dates in July but only one date in August. Plenty of sunshine in the first nine days of September produced daily sightings on the buddleias outside the Visitor Centre and by the Mike Sheldon Hide with two outside the Visitor Centre on several dates. The buddleias produced further sightings of single butterflies on 22nd and 28th September and 6th October but one in the Sensory Garden on 7th October (ST) was the last reported sighting of the year.

Painted Lady (*Vanessa cardui*)

There were no sightings of this immigrant species in 2011 and it was looking to be the same again this year until one turned up on the buddleias outside the Visitor Centre on 3rd September (BB). There were several more sightings of what was probably the same butterfly on the buddleias over the next twelve days. One was reported on the Willow Path on 16th September (DC/EC) and one was again on the buddleias on 17th September (DAN). There were no further sightings.

Small Tortoiseshell (*Aglais urticae*)

This was by far and away the most frequently reported butterfly this year. The first sightings were on 11th March, exactly a week earlier than last year. One was seen on the Duck Marsh (BH), one from the Reedbed Hide and two from the Willow Path Hide (JS). There were regular sightings thereafter with up to eight reported and a best count of 12 on 18th June. Butterflies seen from 27th June were in pristine condition and clearly freshly emerged. Last year there were just two sightings between the end of July and the end of September but this year there was a huge improvement despite a very wet August. Buddleias on the Butterfly Bank and outside the Visitor Centre proved

popular in August when weather conditions allowed. Up to eight were counted round the white buddleia on the Butterfly Bank on the few sunnier days. Small numbers of caterpillars were seen in the Willow Coppice on 10th August (JK) but there were no other reports of caterpillars. Warm, sunny conditions in the first nine days of September produced up to eight on the buddleias outside the Visitor Centre. One on the John Ackroyd Meadow on 14th October looked like being the last of the year but there was a very late record of one at the edge of the Duck Marsh on 11th November in mild conditions (PC/GJB).

Peacock (*Aglais io*)

This species hibernates over winter and usually emerges in March or April. A spell of warm, sunny days in the latter part of March produced a run of sightings from 24th, one on the Willow Path on this date being the first of the year (DC/EC), 10 days later than last year. On 28th March at least five were seen between the Visitor Centre and the river seat (JB/MB). An extremely wet April resulted in just a handful of sightings and seven on 8th May was the best count of the spring (PM/BM). More than 100 caterpillars were counted on the river path on 11th July (RS) and the first freshly emerged butterfly was seen near the Visitor Centre on 4th August (DC/EC). After a very poor year in 2011 with no double figure counts in the summer months, there was a distinct improvement this year despite the very poor summer. Ten were counted on buddleias outside the Visitor Centre and on the Butterfly Bank on 20th August; there was a count of 19 on 24th August and 35 on 28th August (PM/BM). A buddleia by the Mike Sheldon Hide proved a big attraction with regular counts in double figures. The white buddleia on the Butterfly Bank produced similar counts. There were a few autumn records and one outside the workshop on 21st October was the last of the year (JS).

Comma (*Polygonum c-album*)

This is another species that hibernates over the winter months and usually emerges from early March onwards but it was a disappointing year as regards numbers. One outside the Reedbed Hide on 11th March was the first of the year (JS), 12 days earlier than last year. There were no further sightings until 26th March when one was reported in the Manager's Garden. There was then only one other spring record at the Dragonfly Ponds on 30th May. Freshly emerged

butterflies started to appear from 15th July but no more than three were reported and, more often than not, just single butterflies - very much in line with last year. One on the riverside path on 21st October was the last of the year (JS).

SATYRIDAE

Speckled Wood (*Pararge aegeria*)

One seen in the Willow Coppice on 5th May (PM/BM) was the first of the year, nearly three weeks later than last year. Numbers were very similar to last year with no more than three reported in the early part of the season and up to six along the Willow Path in August. With its dappled shade the Willow Path provides ideal habitat and again most records came from here. Freshly emerged butterflies started to appear from 10th August. This species rarely visits the buddleias but one was seen on buddleias outside the Visitor Centre on 7th September. One near the Manager's Garden on 7th October was the last of the year (ST).

Wall Brown (*Lasiommata megera*)

There had been no sightings of this species on the reserve in the last four years and none had been expected this year, so one photographed on the river path near the river seat on 5th September was a bit of a bonus (PL). Wall brown has suffered a drastic decline in the Leeds area in recent times.

Gatekeeper (*Pyronia tithonus*)

There was a considerable improvement on last year when only four records were submitted. Several observers reported sightings of single butterflies on 25th July. On 27th July single males were seen at the edge of the Lagoon and on the Willow Path. However, the majority of sightings subsequently were on the John Ackroyd Meadow and the Butterfly Bank. Numbers are clearly still very low with most observers reporting just single butterflies. but three were seen on John Ackroyd Meadow on 8th August (DC/EC). One in the Sensory Garden on 9th September was the last of the year.

Meadow Brown (*Maniola jurtina*)

After fairly poor years in 2010 and 2011 there was no real improvement this year. Surprisingly, there were no sightings until 4th

July when four were reported on the John Ackroyd Meadow (JS), a month later than last year. There were regular sightings on the two meadows thereafter with c20 on John Ackroyd Meadow on 16th July (PM/BM) the highest of the year. There were few other double figure counts, the best from Mike Fisk Meadow being just six. Two on the John Ackroyd Meadow on 9th September were the last of the year (DC/EC).

Ringlet (*Aphantopus hyperantus*)

In its short flight period this species will fly in cloudy and damp conditions and it needed to do this year in what was the wettest summer on record. One at the side of the Lagoon on 1st July was the first of the year (JB et al), 11 days later than last year. Despite the weather, there were rather more sightings reported than last year and, whilst numbers were generally on the low side, there were a number of double figure counts. The most productive areas were the John Ackroyd Meadow, the Lagoon margins and the long vegetation along the side of the entry road. A single insect on the Butterfly Bank on 9th August (PM/BM) was the last of the year, nearly four weeks later than last year.

Small Heath (*Coenonympha pamphilus*)

First recorded on the reserve in 2005, there had been no sightings since then. However, there was an unconfirmed report of one at the Dragonfly Ponds on 26th August.

BUTTERFLIES

First and Last Dates - 2012

Species	First Date	Last Date
Small Skipper	5th July	22nd August
Large Skipper	4th July	30th July
Large White	2nd May	1st October
Small White	27th March	29th September
Green-veined White	27th April	6th September
Orange Tip	29th March	12th June
Brimstone	23rd May	23rd May
Small Tortoiseshell	11th March	11th November
Comma	11th March	21st October
Painted Lady	3rd September	17th September
Red Admiral	1st July	7th October
Peacock	24th March	21st October
Meadow Brown	4th July	9th September
Gatekeeper	25th July	9th September
Ringlet	1st July	9th August
Small Heath	-	-
Speckled Wood	5th May	7th October
Wall Brown	5th September	5th September
White-letter Hairstreak	-	-
Small Copper	30th April	3rd October
Holly Blue	16th August	28th August
Common Blue	26th May	26th May

MOTHS

It was a disappointing year, largely due to the weather, and light traps were operated on just seven nights. There was no spring trapping done and light traps were not run until 8th June, the night prior to our Springwatch Event. On the same weekend last year temperatures plummeted overnight and the total catch amounted to just 25 macro moths of 14 species. It was somewhat better this year with overnight temperatures not dropping below 10°centigrade and a total catch of 124 macro moths of 25 species. Traps were run in the Sensory Garden, on the Butterfly Bank and in the Willow Coppice

On the night of 21st July one Robinson trap in the Sensory Garden produced 371 macro moths of 47 species and 70 micro moths of 27 species. Pinion-streaked snout (*Schrankia costaestrigalis*) was a new macro moth for the reserve with three specimens caught. Due to its very small size this moth can easily be dismissed as a micro. Three new micro moths were also caught - *Metzneria lappella*, *Pandemis cerasana* and *Hedya pruniana*. Traps were run on five further nights between 25th July and 5th September with fairly modest results. The only other new macro moth caught this year was white satin moth (*Leucoma salicis*). This is described as uncommon and thinly distributed in Yorkshire but we do have all the food plants here, ie. poplars, willows and sallows.

Whilst moth trapping was fairly disappointing a good range of species was still found round the reserve during daylight hours. Even in poor years common carpet (*Epirrhoe alternata alternata*) is abundant. A walk round the reserve on 5th July produced at least 50 despite the fact that these are not day fliers. Bentley's Path - the path between the Scrubland and the Dragonfly Ponds - was very productive some days. A micro moth - *Elachista maculicerosea* - photographed here on 20th August was a new species for the reserve. This is an uncommon and thinly distributed species in Yorkshire and the larval food plants are reed canary-grass (*Phalaris arundinacea*) and common reed (*Phragmites australis*), both of which are well established on the reserve. Using a butterfly net, 29 small rivulets (*Perizoma alchemillata*) were caught on Bentley's Path on 2nd July and five green carpets (*Colostygia pectinataria*) on 29th August (RS).

The Nettle-tap (*Anthophila fabriciana*) - a micro moth - was abundant along the path in August.

Perhaps the most interesting new species of the year was seen from the Visitor Centre, egg laying on a flower head of tansy (*Tanacetum vulgare*) on 26th August. The moth was photographed and subsequently identified as the tansy plume moth (*Gillmeria ochrodactyla*). The larvae feed on tansy, mining down a shoot, hibernating through the winter in the roots and burrowing up another shoot in the spring. It is nationally scarce and classed as a rare and very local resident in Yorkshire. The first record for VC64 only came a couple of months earlier from Spofforth. Interestingly, tansy was only introduced to the reserve a few years ago but it has spread rapidly on the compound banking and around the Visitor Centre.

Among the day-flying moths the cinnabar (*Tyria jacobaeae*) continues to struggle with just two reports of single moths on 12th and 18th June. Common ragwort (*Senecio jacobaea*), the main larval food plant, has to be eradicated from the meadows but is very common on the wetlands and along the river path. However, caterpillar numbers were again low with a best count of just nine on the river path and five around the Lagoon.

The day-flying burnet moths were also hard to find. The narrow-bordered five-spot burnet (*Zygaena lonicerae*) was only recorded on two dates in July and there were no confirmed reports of six-spot burnet (*Zygaena filipendulae*). The other day-flying moth, the black chimney sweeper (*Odezia atrata*), was only recorded on one date in June on the John Ackroyd Meadow.

DRAGONFLIES AND DAMSELFLIES

2012 was a fairly average year for dragonflies. There was a good, largely dry spring and the increase in the number of Large Red Damselfly *Pyrrhosoma nymphula* (a Spring species) compared to the previous year was very encouraging, especially as breeding activity was recorded. The summer and autumn were less good, with a considerable amount of rain. Blue-tailed Damselfly *Ischnura elegans* is probably more abundant on the dragonfly ponds than reported. It occurs at about the same time as the Azure Blue Damselfly *Coenagrion puella* and the bright blue of the latter species catches the eye, possibly causing the Blue-tailed Damselfly to be overlooked. Southern Hawker *Aeshna cyanea* numbers were better than the previous year, an encouraging sign. As usual there were good numbers of Migrant Hawker *Aeshna mixta* and excellent numbers of Banded Demoiselle *Calopteryx splendens*, Brown Hawker *Aeshna grandis* and Common Darter *Sympetrum striolatum*. However, records of the Emerald Damselfly *Lestes sponsa* are disappointingly low. There seems to be no particular reason why it should not be present in reasonable numbers, especially in view of the presence of a marsh area with plenty of reed cover. The Common Blue Damselfly *Enallagma cyathigerum* is still a rare occurrence at the dragonfly ponds, seeming to prefer the larger bodies of water on the reserve. Numbers of Emperor Dragonfly *Anax imperator* and Four-spotted Chaser *Libellula quadrimaculata* were disappointingly low, possibly as a result of the poor weather, and again there were no records of either Ruddy Darter *Sympetrum sanguineum* or Black-tailed Skimmer *Orthetrum cancellatum*.

Peter J Mill

Large Red Damselfly (*Pyrrhosoma nymphula*)

This was probably the best year to date for this species as regards numbers reported. Two teneral on the marsh area at the Dragonfly Ponds on 30th April (PJM) were the first of the year, just two days later than last year. There were no further records until 22nd May when one was seen at the Education Pond (JK) and on 23rd May six were reported at the ponds (PJM) and five at the back of the Wet

Grassland (JB). Breeding activity was also first noted on 23rd May with a pair in tandem and two ovipositing on the ponds (PJM). The best count of the year came on 28th May when 15 were reported at the ponds with three pairs in tandem and four ovipositing (PJM). On 6th June six were seen at the ponds with three ovipositing (PJM). The last record of the year was of a single insect at the Dipping Pond on 22nd July (JB), some three weeks later than last year.

Azure Damselfly (*Coenagrion puella*)

The first records this year were on 23rd May, more than three weeks later than last year. There was a count of 22 at the Dragonfly Ponds (PJM) on this date. By 28th May numbers at the ponds had increased considerably with between 100 and 500 reported and a good deal of breeding activity (PJM). Numbers remained high through much of June, falling away somewhat in July. Small numbers were seen at the ponds throughout August and breeding activity was last reported on 8th September - a single pair in tandem on Woodhead Pond (PM/BM). A single insect at the ponds on 9th September was the last of the year (DC/EC), three and a half weeks later than last year.

Common Blue Damselfly (*Enallagma cyathigerum*)

This species is much less common here than the Azure Damselfly and is more likely to be seen around the main water bodies on the reserve. There were a number of records submitted from the Dragonfly Ponds but some of these almost certainly related to the very similar Azure. A report of 20+ at the back of the Wet Grassland on 23rd May (JB) was probably the first reliable record this year, just two days earlier than last year. However, there was one confirmed report of a single Common Blue at the ponds on 4th July (BM) and another of a single insect on the river path on 6th August (PJM). The most reliable site for this species is probably the Lagoon and several were reported here in July and August. A single insect by the Mike Sheldon Hide on 28th August (BM) was the last confirmed sighting of the year.

Blue-tailed Damselfly (*Ischnura elegans*)

This species is still only recorded in low numbers and, once again, there were no reports of breeding activity. Three at the Dragonfly Ponds on 23rd May were the first of the year (JS), two weeks later than last year. There were no further sightings until 18th June when

two were seen at the old dipping pond (PJM). There was a further gap of almost a fortnight before the next sighting - one at the edge of the Lagoon on 1st July (BM). We had to wait until 18th July for the next sighting of a single insect on the Willow Path (TP). There were sightings most days thereafter until 22nd August but no observers reported more than three. One on the Pebble Beach Pond on 28th August (PM/BM) was the last reported sighting of the year, just one day later than last year.

Emerald Damselfly (*Lestes sponsa*)

This species was first recorded on the reserve in 2006 but there had been no records in 2008, 2009 and 2010. Last year produced just two records. This year there were two records, both on the same day from the same observer. On 22nd July one was reported at the Wet Grassland Hide and a male was seen on the Dipping Pond (RB).

Banded Demoiselle (*Calopteryx splendens*)

Like last year, after the Brown Hawker this was the most frequently recorded dragonfly on the reserve. A single male on the Wet Grassland on 24th May (JB) was the first record of the year, six days later than last year. There were some good counts on the riverbank - five males and one female behind the Wet Grassland on 27th May (JB), seven males and two females in the same area on 30th May (JB) and 13 males and four females on the river path on 25th June (PJM) being the best. Away from the riverbank three males and two females were seen at the edge of the Lagoon on 29th May. There were also sightings on the John Ackroyd Meadow, at the Dragonfly Ponds, on the entry road, by the Visitor Centre and on the Willow Path. On 4th August four males and four females were reported at the Dragonfly Ponds and along the river path (AG/RG). Unlike last year, sightings continued throughout August and into September, a single male on Scarborough Pond on 8th September (JS/PA) being the last reported sighting.

Common Hawker (*Aeshna juncea*)

This species shows a preference for acidic upland areas but there have been confirmed sightings here in the past. Sightings were reported on five dates this year between 4th August and 9th September with two on one date but there is a possibility these sightings related to the more common Southern Hawker.

Migrant Hawker (*Aeshna mixta*)

The first sightings this year were reported on 28th August with single dragonflies on Bentley's Path and the Butterfly Bank (BM), just four days earlier than last year. Warm, sunny weather in the first nine days of September produced a spate of sightings with six on 2nd and 11 on 8th (PM/BM) the highest counts. The Wet Grassland and the area around the Reedbed Hide were particularly productive. Much more unsettled weather and a very wet last 10 days in September curtailed sightings and there was just one other September record on 29th - a single dragonfly near the Lagoon Hide (JB). There were sightings of single dragonflies on four dates in October, the last on 19th on the Wet Grassland. There were no reports of breeding activity this year.

Southern Hawker (*Aeshna cyanea*)

After a very poor year in 2011 with just two records there was a considerable improvement this year. A single larva was found in the marsh area at the Dragonfly Ponds on 6th June (PJM) and the first adult dragonfly - a male - was reported on Scarborough Pond on 9th August (PM/BM). A female was seen at the roadside by the Visitor Centre on 13th August (PM/BM) and there were sightings most days thereafter to the end of the month. On 15th August a female was reported ovipositing on Co-op Pond (AG/RG). Most sightings involved single dragonflies but a male and female were seen on the Wet Grassland on 24th August (DW). There were sightings of a female on the long ditch at the ponds on 6th September and one on the Duck Marsh on the same date (PM/BM). On 9th September two males were reported at the ponds (DC/EC). Very unsettled weather conditions throughout the rest of September put an end to further sightings but one was on Woodhead Pond and the long ditch on 19th October (PM/BM) and a female on the Wet Grassland on 20th October was the last record of the year (DC/EC).

Brown Hawker (*Aeshna grandis*)

Common on all the wetland areas, this was again the most frequently recorded and the most numerous of the larger dragonflies on the reserve. Several larvae were found in Chadwick Pond on 6th June (PJM). Last year produced a very early record on 11th June but there were no sightings this year until 4th July when one was on the Duck

Marsh (BM/PA) and one in the Willow Coppice (DW). There were no further sightings until 14th July when two were reported at the edge of the Lagoon but there was daily activity thereafter and there were some excellent counts in August. A walk from the Willow Path to the John Ackroyd Meadow via the Dragonfly Ponds on 2nd August produced 26 (PM/BM); between 40 and 50 were counted on 9th August between the Visitor Centre and the ponds and c40 were seen on the same route on 13th August (PM/BM). Ovipositing was first noted on 2nd August on the Education Pond and Co-op Pond (JB/MB). On 9th August 15 were counted ovipositing on eight different ponds; nine were ovipositing on five ponds on 13th August; 10 on six ponds on 14th August; 14 on eight ponds on 16th August; 12 on six ponds on 20th August and eight on five ponds on 28th August (PM/BM). August also produced a report of one killing a Small Tortoiseshell butterfly (JB). There were again numerous reports of this dragonfly hunting at dawn and dusk. A single insect at the Dragonfly Ponds on 7th October was the last reported sighting of the year (ST).

Emperor Dragonfly (*Anax imperator*)

It was yet another disappointing year for this species. 2010 and 2011 both produced just four records and this year there were just two. One was reported between the Lagoon and Duck Marsh on 24th July (JB) and a male was seen at the Dragonfly Ponds on 12th August (SW).

Four-spotted Chaser (*Libellula quadrimaculata*)

It was a very poor year for this species with only three records submitted. A male at the Dragonfly Ponds on 27th May (JS) was the first, some two weeks earlier than last year. One was seen on the marsh area at the ponds on 29th May (PM/BM) and three males were on the ponds on 18th June (PJM).

Broad-bodied Chaser (*Libellula depressa*)

Last year produced a very early record on 30th April but a female on the river path near the Dragonfly Ponds on 13th May (DC/EC) was the first record this year. There were no further sightings until 24th May when a male was reported at the ponds (JK). Most records came from the Dragonfly Ponds and were of single insects. However, a male and female were on the ponds on 10th June (DC/EC); three

males were on Co-op Pond and Scarborough Pond on 18th June (PJM) and two males were at the ponds on 20th June. There were no reports of breeding activity. A single female at the ponds on 11th August was the last reported sighting of the year (DC/EC).

Common Darter (*Sympetrum striolatum*)

Single larvae were found in Scarborough Pond and the marsh area on 6th June and in Mabgate Pond on 25th June (PJM). Single females were also reported at the ponds on 6th June and 24th June (DC/EC). There were then no further sightings until 18th July when one was seen on the John Ackroyd Meadow (TP). There were regular sightings through August and the first few days of September with reports from the Dragonfly Ponds, the Dipping Ponds, the Duck Marsh, Tim's Field, the two meadows and the Willow Path. Among the higher counts 11 were on the ponds on 9th August, eight were there on 14th August and 12 were reported on 28th August (PM/BM). In each case there was a preponderance of males. Breeding activity was first noted on 28th August with two pairs in tandem at the Dipping Ponds and one pair on the long ditch (PM/BM). A single male on the Pebble Beach Pond on 21st October was the last sighting of the year (PM et al).

Ruddy Darter (*Sympetrum sanguineum*)

There were no records this year. This species has not been seen on the reserve since 2009 when there were just two records.

Black-tailed Skimmer (*Orthetrum cancellatum*)

There were no records again this year. This species was last recorded in 2010.

Terminology

Exuvia - The shed larval skin. Plural: exuviae

Ovipositing - The act of egg laying

Teneral – A newly emerged adult dragonfly without the full coloration of the mature adult

Dragonflies and Damselflies
First and Last Dates - 2012

Species	First Date	Last Date
Large Red Damselfly	30th April	22nd July
Azure Damselfly	23rd May	9th September
Common Blue Damselfly	23rd May	28th August
Blue-tailed Damselfly	23rd May	28th August
Emerald Damselfly	22nd July	22nd July
Banded Demoiselle	24th May	8th September
Common Hawker	?	?
Migrant Hawker	28th August	19th October
Southern Hawker	9th August	20th October
Brown Hawker	4th July	7th October
Emperor Dragonfly	24th July	12th August
Four-spotted Chaser	27th May	18th June
Broad-bodied Chaser	13th May	11th August
Common Darter	6th June	21st October
Ruddy Darter	-	-
Black-tailed Skimmer	-	-

Invertebrates in the Dragonfly Ponds

The 'dragonfly ponds' include the eight ponds, long ditch and marsh region in the north-east of the reserve as well as the adjacent 'Education Pond'.

Microscopic animals.

The microscopic animals that have been found include two amoebozoans, a choanoflagellate, seven ciliophorans, a gastrotrich, five rotifers and several small, filter-feeding crustaceans. Of the crustaceans there were three brachiopods, two copepods and an unidentified ostracod, the last of these having a bivalve, calcareous shell. One of the brachiopods, the water flea *Daphnia* sp. was extremely common as was the copepod *Cyclops* sp., so-named because of its single eye (Table 1).

Table 1. Microscopic aquatic animals

Amoebozoa

Arcella discooides

Centropyxis sp.

Choanoflagellata

Codosiga sp.

Ciliophora

Coleps hirtus

Colpidium sp..

Stylonichia sp..

Stentor sp.

Litonotus sp.

Homalazon sp.

Vorticella sp.

Vaginicola sp.

Crustacea

Branchiopoda

Cladocera

Chydorus sphaericus

Daphnia sp.

Copepoda

Cyclops sp.
Diaptomus sp.
Canthocampus sp.

Rotifera

Euchlanis dilatata
Philodinavus sp.
Lepadella ovalis
Trichocerca longiseta
Philodinavus

Gastrotricha

Chaetonotus sp.

Larval invertebrates

The larvae of six species of dragonfly (Odonata) have been found. Three of these were damselflies (Zygoptera), i.e. Azure Damselfly *Coenagrion puella*, Blue-tailed Damselfly *Ischnura elegans* and Large Red Damselfly *Pyrrhosoma nymphula* and three were 'true' dragonflies (Anisoptera), i.e. Brown Hawker *Aeshna grandis*, Southern Hawker *A. cyanea* and Common Darter *Sympetrum striolatum*. Larvae of two other anisopterans, Migrant Hawker *Aeshna mixta* and Broad-bodied Chaser *Libellula depressa*, were not found this year but adults of both species were present.

Numerous other insect larvae have been found. The larvae of one of the mayflies (Ephemeroptera), the Pond (Lake) Olive Dun *Cloëon dipterum* was extremely abundant; another, Angler's Curse (White Midge) *Caenis* sp. (probably *C. horaria*) was found on a few occasions. *C. dipterum* has plate-like gills on the sides of seven of its abdominal segments and can be easily seen, whereas species of *Caenis* have most of the gills under a cover.

There were a number of dipteran (true flies) larvae, including *Psectrocladius obivus*, which lives inside a mucous case. Its head emerges to feed and it can temporarily leave its case completely. Other dipterans found were the Phantom Midge larva *Chaoborus* sp. with its fore and aft air sacs that enable it to obtain neutral buoyancy, *Probezzia* sp. and a bloodworm (*Chironomus* sp. – a non-biting

midge); these all belong to the Nematocera. Other dipteran larvae remain to be identified but include a probable sciomyzid.

At least two species of caddis fly have been found but only one has so far been identified, one of the Longhorn Caddis, the Bicoloured Sedge *Triaenoides bicolour*, which has a case made of short pieces of stem arranged in a spiral fashion and which can row itself through the water with its long, fringed hind legs. One of the other caddis species has a rather more untidy case consisting of long pieces of plant material and belongs to the family Limnephilidae. The Neuroptera were represented by a single species of Alder Fly, *Sialis lutaria*, clearly recognised by its segmented lateral gills (and terminal gill)

One species of lepidopteran larva has been found, the Brown China-mark Moth, *Elophila (Nymphula) nymphaeata*. This is interesting because it is adults of the Small China-mark moth *Cataclysta lemnata* that are numerous around the ponds. *E. nymphaeata* larvae have been found in cases made from Fringed Water Lily but also use leaves of *Potamogeton*, whereas larvae of *C. lemnata* make cases from Duckweed. For the first few days the larvae of *E. nymphaeata* mine into plant material before constructing their case.

Table 2. Aquatic Insects

Odonata

Zygoptera

Coenagrion puella Azure Damselfly

Ischnura elegans Blue-tailed Damselfly

Pyrrohosoma nymphula Large Red Damselfly

Anisoptera

Aeshna grandis Brown Hawker

Aeshna cyanea Southern Hawker

Sympetrum striolatum Common Darter

Ephemeroptera

Cloëon dipterum Pond (Lake) Olive Dun

Caenis sp. (prob. *C. horaria*) Angler's Curse or White Midge

- Hemiptera
 - Heteroptera
 - Hesperocoxa linnaei* (Lesser) Water Boatman
 - Notonecta* sp. Back Swimmer
 - Ilyocauris cimicoides* Saucer Bug
 - Gerris lacustris* Water Skater
 - Nepa cinerea* Water Scorpion
- Neuroptera
 - Megaloptera (Alder flies & Snake flies)
 - Sialis lutaria*
- Diptera
 - Nematocera
 - Chaoboridae
 - Chaoborus* sp. Phantom Midge larva
 - Chironomidae
 - Psectrocladius obvius*
 - Chironomus* sp.
 - Ceratopogonidae
 - Probezzia* sp.
 - Trichoptera
 - Leptoceridae
 - Triaenodes bicolor* (Bicoloured Sedge).
 - Lepidoptera
 - Elophila (Nymphula) nymphaeata* (Brown China-Mark Moth)
 - Coleoptera
 - Gyrinus* sp. (prob. *G. natator*) Whirligig Beetle

Adult invertebrates

Many adult insects live in water or on the surface, notably the true bugs (Hemiptera) and the water beetles (Coleoptera). Amongst the true bugs were two species of water boatmen, a corixid, *Hesperocoxa linnaei* (sometimes referred to as the Lesser Water Boatman) and a backswimmer *Notonecta* sp.; also the Water Skater *Gerris lacustris*, Water Scorpion *Nepa cinerea* and the Saucer Bug *Ilyocoris cimicoides*. Several species of water beetle have been found but, apart from a Whirligig Beetle (*Gyrinus* sp. (probably *G. natator*), have not yet been identified. A springtail (Collembola) *Sminthurida*

aquaticus occurs – it was actually found in the aquarium in the Visitor Centre, which contains water and vegetation from the dragonfly ponds. This animal is only about 1 mm long and it uses a specialised abdominal structure to spring up from the water surface.

Amongst the Platyhelminthes two flatworms (triclads) occur: *Polycelis tenuis*, which has numerous eyespots around its head and along its sides, and *Schmidtea (Dugesia) polychroa*, which has just a pair of eyespots. The former is the commoner of the two. The annelids are represented by two species of leech. One is the Common Fish Leech *Piscicola geometra*, the other is, as yet, unidentified.

Amongst the crustaceans found were the amphipod *Crangonyx pseudogracilis* and the isopod *Asellus aquaticus*. Also found were two water mites (Arachnida, Acari) – *Hydrodroma (Diplodontus) despiciens* and *Arrenurus* sp.

Five species of mollusc have so far been identified. One of these, *Lymnea stagnalis* is of the typical 'Pond Snail' type. Two more, *Planorbarius corneus* and *Planorbis carinatus*, are Ramshorn snails. The Great Ramshorn *P. corneus* has a smooth shell that can reach over 3 cm in width; as the name implies the Keeled Ramshorn *P. carinatus* has a keel on its shell - it is also much smaller, only reaching about half the width of *P. corneus*. The others species found were *Radix balthica*, in which the aperture equals about half the height of the shell, and *Ferrissia wauteri*, which has a limpet-shaped shell. A very small bivalve was also found, possibly *Pisidium* sp.

Table 3. Other aquatic invertebrates

Platyhelminthes
Tricladida
Dugesiidae
<i>Schmidtea (Dugesia) polychroa</i>
Planariidae
<i>Polycelis tenuis</i>
Annelida
Hirudinea
Rhynchobdellida
<i>Piscicola geometra</i> (Common Fish Leech)

Crustacea - Malacostraca
 Amphipoda
 Crangonyx pseudogracilis
 Gammarus pulex
 Isopoda
 Asellus aquaticus
Arachnida
 Acari
 Hydrodroma (Diplodontus) despiciens
 Arrenurus sp.
Mollusca
 Gastropoda
 Ancylidae
 Ferrissia wauteri
 Lymnaeidae
 Radix balthica
 Lymnea stagnalis
 Planorbarius corneus
 Planorbis carinata

Thanks are due to Richard Baker, Steve Brooks, Frans Janssens, Jerry Knapp, Adrian Norris and members of the Leeds Microscopical Society for help with some of the identifications.

Peter J. Mill

Education Dipping Pond 2012

The Education Dipping Pond is a great educational resource for local schools and youth organisations and during 'the season' the numerous groups of youngsters which visit the reserve always enjoy the chance to discover what is lurking beneath its surface. Some of the creatures are easy to see in or on the water, and can be targeted by the young fisherfolk, while others only become apparent when the contents of the bandy net is emptied into the tray and one goes through the fragments of plant leaves and stems and mud/grit. Regrettably, there isn't always time to do a full identification on all creatures which emerge in a dipping session although sometimes a quick digital photograph can provide enough information to at least reach a partial identification, e.g. to family or genus level if not species. For some pondlife this is as far as one can go without resort to microscopy or anatomical dissection of some obscure anatomical feature, often its private parts. It is difficult to know where to start in describing the biota of the pond. The plants in the pond are fairly self-evident so I will give these a miss and concentrate, largely, on the animals. Hopefully the following gives some idea of the range and diversity of the species that were found in 2012. As well as ensuring the students enjoy their session we always try to get across some lessons about biodiversity, conservation, adaptations and animal development and metamorphosis. The section below is grouped according to biological classification.

Segmented (Annelid) Worms

The main aquatic representatives of this group are the leeches (class Hirundinea), a most unloved invertebrate. At least 2 species have been recorded. The commonest is a slender greenish species with large suckers at each end of a narrow body which moves around rapidly with a looping motion, first stretching out its body attaching the mouth sucker and then pulling up the rear-end sucker before stretching out again – repeatedly. This is the Common Fish Leech (*Piscicola geometra*). The other species seen was I think *Glossiphonia complanata*. Members of this group are interesting as they confound the stereotypic image of leeches. Admittedly they are blood sucking

parasites, although to be fair to this species it is only snail's blood, but they appear to be caring parents. Some species of the Glossiphonia group attach their eggs to the underside of their body and the young, when hatched, are carried round attached to the parents belly! One individual we saw appeared to have a furry growth stuck onto it, but closer examination (and a photo) revealed this to be a cluster of dozens of miniscule thread-like juveniles (about 1 mm wide by 7 to 10 mm long).

Molluscs

Unsurprisingly there are plenty of shelled molluscs principally of the Gastropod (snail) type. We found two main types, those with flat coiled shells, like Catherine Wheels, and those with spiral coils. The former are of the Ramshorn Snail group (*Planorbis* or *Planorbarius* species) and the latter are mostly Pond Snails (*Lymnaea* species). However we haven't taken identification further to determine the exact species as there are several in each group.

Arthropods – creatures with jointed legs, including crustacean, arachnids and insects

Crustacea

While it is likely that water fleas are present, they haven't been noted. The most frequently seen crustacean (most days) is certainly the Freshwater Hog Louse (*Asellus aquaticus*), an isopod (flattened from top-to-bottom) which looks and behaves rather like an aquatic Woodlouse. We occasionally note an amphipod (flattened from side-to-side) Freshwater Shrimp but haven't identified it to genus level.

Arachnids

The main arachnids are water mites (order Hydracarina) which are very numerous, there appear to be several different species. However while identification of these tiny (about 2mm on average) spider-like creatures is not easy, we certainly have *Hydrachna* species and at least 2 other species.

Spiders (order Araneae) are not well represented. We do not have true water spiders or raft spiders but do find an interesting and

charming type of Wolf Spider – the Pirate Spider (*Pirata piraticus*) which can be seen running around on water plants and also sometimes walking on the surface of the water. In the breeding season females can often be seen carrying a white egg sac which is larger than the dark abdomen. This spider is also very common on the original dipping pond where it is easily seen on and around Water Soldier plants.

Insects (class Insecta)

The insects provided the greatest variety of species with representatives from several different orders and families. Some species are aquatic for their entire life cycle while others only live in the pond during their juvenile stages.

Odonata – Dragonflies and Damselflies

Both dragonfly and damselfly larvae are regularly found in the pond, though the latter are much more frequent with many being found every time we dip. Normally a few dragonfly larvae are found most days, which is always good as they are great favourites with the students. We don't have time to identify the species of dragons or damsels found but so far I think all the dragonfly larvae I've found in the education pond have been of the hawk type.

Ephemeroptera - Mayflies

Mayfly larvae are common and regularly found. They always attract interest from the students, probably due to their rapid movement (being common prey items for other creatures they need to move fast) and the fact that the adult insects have such a short life, generally a day or two. There appear to be two species, which have been identified courtesy of photographs. By far the commonest, found virtually every day, is the small larva of *Cloeon dipterum*, the Pond Olive. The other mayfly is a species of *Caenis*, and is even smaller and only seen occasionally.

Megaloptera

In May we begin to see, on plants around the pond, adults of the rather dark and menacing looking Alderfly (*Sialis lutaria*) and on one occasion we were lucky enough to find an Alderfly larva. This was even more sinister than the adult, due to its large mandibles (jaws) and ability to run very rapidly. Unsurprisingly this is a voracious predator. Its appearance is made more exotic by the tapering abdomen fringed with tracheal gills, which it can move rhythmically, apparently to help oxygen uptake.

Hemiptera – true bugs

There are a wide range of hemipteran water bugs, a group that includes some of the iconic and exciting pond creatures, many of which are easy to see. True bugs are characterised by proboscis-like sucking mouth parts which, depending on species, can be used to suck up detritus, plant fluids or animal juices. Some are ferocious predators while others effectively feed on garbage! Probably the most obvious bugs we see are the Pond Skaters (*Gerris* species) which glide rapidly over the surface of the water with wide-spread legs. Both main types of Water Boatmen are common in the Education Pond, the Lesser being much more frequently seen. The Greater Water Boatman (*Notonecta* species) are larger and darker and generally swim on their backs - their back legs are very long and at rest often point forward. They are fierce predators and if handled can give a painful prick. Helen Mellanby, in her book on 'Animal Life in Freshwater', advises that "it must on no account be placed in an aquarium with any animal you wish to remain alive"! We had proof of this when in one dipping session one killed a Damselfly larva. Lesser Water Boatmen, members of the genus *Corixa*, couldn't be more different from their cousins. They are smaller and browner and swim on their fronts and feed on small particles of organic material which they Hoover up with their proboscis – refuse disposal operatives. A few times a year we are fortunate to catch a Water Scorpion (*Nepa cinerea*) a large, dark brown, flattish bug its body is about an inch long, in addition to which it has a breathing tube about a third of its length (which looks like a sting but isn't). Its claw-like front legs are used to grasp and hold prey while it sucks out their vital fluids. In September a new species turned up that looked like a small

oval beetle about half an inch long but closer examination showed it to be a Saucer Bug, *Ilyacorus cimicoides*. It moves rapidly and has front legs adapted to grasp prey. Apparently this is another bug that can give the unwary a bite. Interestingly, although it has wings, it can't fly as the wing muscles are too weak.

Trichoptera – Caddis flies

There is a lot of literature on Caddis flies, mainly because the adults are good trout and salmon food and many of the artificial flies tied by fly fishermen are intended to mimic adult caddis flies. Most caddis fly larvae are aquatic and live in small protective cases which they build out of materials such as grains of minerals, pieces of grit, bits of plant material etc. In the education pond I have seen at least two, possibly more, species. By far the commonest, and often the only, caddis fly larva found on dipping sessions is *Triaenodes bicolor* (Bicoloured Sedge). This larva constructs its case out of small straight evenly shaped fragments of plant root or leaf assembled in a spiral fashion to produce a greenish cone. It has long hind legs which it sticks out of the cone and uses to swim with. The other much larger, and less common, species has a case constructed of large and irregular plant fragments and could not be identified with certainty but may be in the genus *Limnephilus*.

Lepidoptera – Butterflies and Moths

We have no aquatic butterflies and few aquatic moths in Britain, but we do have at least one such moth at Rodley. On the day of our Spring Watch, and subsequently, we found several large (over an inch long) dull brownish green caterpillars in the dipping nets, generally in the presence of cut-up plant fragments. Sometimes they were found peeping out of small shelters constructed from neatly cut pieces of leaves (usually from Fringed Water Lily, *Nymphoides peltata*) joined together by strands of silk. Several of these shelters and some plant leaves, for food, were placed in the Pondlife tank in the visitor centre. Fortunately the caterpillars survived the threat posed by the dragonfly larvae in the tank and, after pupation, the adults emerged and we could confirm their identity as Brown China-Mark Moths, *Elophila (Nymphula) nympheata*.

Diptera – true flies

By far the commonest representatives of dipterans are larvae of *Chironomus* species, the adults of which are non-biting midges; these are found in most dipping sessions. The most regularly found types are the red, slender larvae about 10 to 15 mm long, commonly known as bloodworms. These are red due to the presence of haemoglobin, the pigment of mammalian blood, however *Chironomus* makes its own pigment rather than drinking our blood, and it is used to help take up oxygen from the water, enabling it to live at low oxygen concentrations in the muddy bottom of the pond. We also have some *Chironomus* larvae that live near the surface of the pond and are not red. Occasionally we find the very slender, almost transparent, ghostly larvae of *Chaoborus*, well named as Phantom Midge larvae.

Coleoptera – Beetles

By far the most regularly found beetles are the Whirlygig beetles (*Gyrinus* species), the adults of which gyrate enchantingly on the surface of the pond, especially on sunny days. Other water beetles are often found but are not as numerous. We weren't able to identify any of the beetles to species level, not even the Whirlygigs of which there are 10 species. Disappointingly we weren't able to find any beetle larvae which are interesting and often bizarre creatures.

Amphibians

Common Frogs (*Rana temporaria*), Common Toads (*Bufo bufo*) and occasional Newts (*Triturus* sp.) can sometimes be found in the pond but rarely let themselves be caught. This year there was no evidence of any amphibian spawning in the education pond. However, there was plenty of 'action' in the neighbouring 'Dragonfly ponds' and so some frog spawn was 'borrowed' to ensure a ready supply of tadpoles. These provide not only excitement but also a chance to demonstrate metamorphosis as the tadpoles grow, develop first 2 then 4 legs, lose their tails and eventually become fully formed 'froglets' before leaving the pond. The tadpoles are not always easy to catch; some days we see kids scoop out hundreds only to find two days later it is hard for them to catch one. The availability of tadpoles for catching seems to be weather-related, cool dark days see the

tadpoles hiding in the weeds and out of reach while on warm sunny days they move to more open water near the surface.

Fish

There is a regular supply of fish to catch. These vary in size from unidentifiable tiny fry 5 to 6 mm long and 1 or 2 wide to small 3-Spined Sticklebacks (*Gasterosteus aculeatus*) which can grow up to 5 to 7cms but are usually smaller. If we are lucky we sometimes catch an adult male specimen which in the breeding season sports a beautiful red breast and a bluish green back as opposed to the normal muddy greenish grey. I've not been able to identify other fish species. This year sometimes a high proportion of the sticklebacks showed the presence of a variable number (up to a dozen) of large (for a stickleback) spherical shiny white swellings/pustules (up to a 3 or 4 mm diameter). This was a new one for me but thanks to the wonders of Google it was possible to identify these as pustules caused by a microsporidian parasite called *Glugea* (a primitive fungus). More amazingly, I actually found that mugs depicting sticklebacks parasitized by *Glugea* species can be purchased via Amazon for £11.99. It's remarkable what you can discover from the education dipping pond and on Google!

Birds

Apart from birds flying over or heard calling we don't often note birds on the education dipping pond but in September I did spot a Kingfisher (*Alcedo atthis*) on the balustrade around the pond and I guess this makes it the top predator of the ecosystem (so far).

Jerry Knapp

Harlequin Ladybirds at Rodley Nature Reserve An Update

Native to eastern Asia, the harlequin ladybird - *Harmonia axyridis* - was introduced to North America and Europe to control aphids and scale insects. Since its introduction to North America in 1988, it has increased dramatically and is now the most widespread ladybird species on the continent. Said to be the most invasive ladybird in the world, it has already invaded much of northwestern Europe. It arrived in the UK in 2004 and can now be found almost everywhere, although it is still uncommon in Wales and rare in Scotland and the far north of England. It is known here as the harlequin ladybird because it occurs in numerous colour forms. The two most common forms in the UK are orange with 15 to 21 black spots and black with two or four orange or red spots. It can be difficult to tell apart from some of our native species but it is considerably bigger.

Following its first appearance on the reserve in 2009, there were further records in 2010 and 2011. This year there were regular sightings from 25th June on various parts of the reserve, the majority of which were of the common orange form (*H. axyridis succinea*). Most reports were of single ladybirds but four were noted on the Willow Path on nettles on 8th September. On 19th September six "of varying colours" were reported together with 21 larvae on a wooden post by the dry stone wall. On 22nd August one of the black form with two red spots (*H. axyridis conspicua*) was photographed at the Dragonfly Ponds (DA).

In some parts of North America it has reached household pest status due to its habit of invading houses in October in preparation for hibernation (hence one of its local names there - the Halloween ladybird). At Rodley it can be found in the hides at this time of year and several were ejected from the Visitor Centre this autumn.

Among our native ladybirds the 7-spot ladybird (*Coccinella 7 - punctata*) was reasonably numerous and there were a few records of 2 - spot ladybird (*Adalia 2-punctata*) and 22 -spot ladybird (*Thea 22-punctata*). A pine ladybird (*Exochomus 4-pustulatus*) on the Butterfly Bank on 12th March was a new species for the reserve as was a 14 -

spot ladybird (*Propylea 14-punctata*) in the same area on 28th August.

Tree Bumblebees at Rodley Nature Reserve An Update

First recorded on the reserve on 10th June 2009, there were a number of sightings of single tree bumblebees (*Bombus hypnorum*) between 19th May and 21st June in 2011. This year there were reports of single insects on just four dates between 12th June and 5th July. On 12th June one was seen on comfrey flowers (*Symphytum* sp.) by the Wet Grassland Hide and on 13th June one was on phacelia (*Phacelia tanacetifolia*) in the Sensory Garden. Last year one was reported on cotoneaster flowers outside the Visitor Centre and one was again seen here on 20th June. Whilst the flowers are small and insignificant they are a major attraction for various bumblebees. Finally, on 5th July one was again on comfrey flowers in the Sensory Garden.

This species is probably more common at Rodley than the few records suggest and careful study of the many bumblebees to be found, particularly in the Sensory Garden, would almost certainly produce more records.

A New Shieldbug for the Reserve

A shieldbug nymph photographed on Bentley's Path on 23rd August 2012 by volunteer Rob Simpson proved to be *Tritomegas bicolor* - the pied shieldbug. In theory this very handsome species could occur wherever white dead-nettle is established but it has only been known in Yorkshire since about 1970 and has been slow to spread from its South Yorkshire early locations. To date the species has been recorded from Yorkshire Vice Counties 61,63 and 64. We are just in VC64 and the only records from this Vice County to date were from Acaster Malbis, Carlton and South Milford. White dead-nettle is very common on the reserve, particularly so in the area where this specimen was photographed.

The Wetland Bird Survey (WeBS)

This survey is a joint scheme of the British Trust for Ornithology (BTO), Royal Society for the Protection of Birds (RSPB) and Joint Nature Conservation Committee (JNCC), in association with Wildfowl and Wetlands Trust (WWT), to monitor non-breeding waterbirds in the UK. The principal aims of the scheme are to identify population sizes, determine trends in numbers and distribution and identify important sites for waterbirds. Monthly coordinated counts are made by volunteers throughout Great Britain and Northern Ireland. Rodley Nature Reserve is delighted to be involved in WeBS.

Botanical Surveys

Following an initial survey in October 1999 the first comprehensive botany report, broken down by habitat, was produced by Phyl Abbott in 2001. In 2002 the Scrubland and Willow Coppice were surveyed for the first time. Both areas were found to be dominated by nettles and coarse grasses in the more open parts and no plants of importance for conservation were found here. The Wet Grassland was found to be the most diverse and interesting area botanically at the time with the nationally scarce Orange Foxtail Grass (*Alopecurus aequalis*) thriving here.

Over the following years many native species were introduced on the two meadows, at the Dragonfly Ponds, on the Butterfly Bank and in the Sensory Garden. A handful of non-native species were introduced in controlled environments for their value as butterfly friendly plants, notably various buddlieas.

An updated plant list was produced by Phyl Abbott in 2008. Further additions were made as a result of visits by Bradford Botany Group and BEES (Bradford Environmental Education Services) and a number of scarcer species were identified. In August 2009 Geoffrey Wilman carried out a comprehensive survey of the reserve on behalf of West Yorkshire Ecology who were compiling a wetland inventory as part of Natural England's national inventory.

Botany walks have been a feature of our Springwatch events over recent years and we are grateful to Joan Dobson for leading these for us. In addition, Joan has recently produced for us a fully up to date list of all the plants found on the reserve as at June 2012.

Survey of Algae in 2012

As everyone else has said it, here goes: It has been a queer year; many species usually associated with summer, such as *Chroococcus*, *Eudorina* and *Merismopedia*, never appeared at all. The first half of the year we had a healthy growth of *Tolypothrix*, a blue/green filamentous which has characteristic false branching, distinguishing it from the otherwise similar looking and common *Oscillatoria*. Another 'new to us' was *Mischococcus confervicola*, a microscopic Chlorophyte, for the first four months. An algal bloom of *Botryococcus* appeared on the fourth dragonfly pond surface in February. Another cyanophyte *Cylindrocapsa* appeared in March, as well as the xanthophyte *Pseudostaurastrum*, rather uncommon and a bit scary looking.

Good to see *Goniochloris* again in May, and in June *Phormidium* and *Gloeotheca rupestri* and *Crucigeniella rectangularis*. In July was found *Rhabdoderma* and in August, new to us was *Gloeotrichia*, almost visible to the naked eye; this broke up towards the end of the year, allowing a clear view of its disassembled branches. In September another new visitor *Chaetopeltis obicularis*. As late as December, where the count was as high as 46, both *Geminella* and *Selenastrum* were found.

Over the year, 77 species were listed which included a fair few new ones. The heavy rain must have refreshed and re-oxygenated the various ponds.

John R. Hey.

Fungus Report 2012

The annual fungus foray took place on Sunday 4th November this year and we were again fortunate to have Mary Larner leading it for us. There was the usual good turnout of participants with more than 30 adults and several enthusiastic children. After a frosty night and a foggy morning conditions improved somewhat as the fog lifted and although it was overcast it did stay dry, which was an event in itself this year. After the very impressive display of several hundred shaggy inkcaps on the Mike Fisk Meadow last year it was a very different story this year with little or nothing on the meadows. Particularly long vegetation after the very wet summer also made it difficult to find fungi on other parts of the reserve too so, after a short walk along part of the river path and the Winter Walk, it was decided to explore the Willow Coppice, an area not used for forays in previous years. It proved a good choice with a good range of species being found. A full list of the species identified is shown below.

<i>Ascocoryne sarcoides</i>	Purple Jellydisc
<i>Bjerkandera adusta</i>	Smoky Bracket
<i>Bovista nigrescens</i>	Brown Puffball
<i>Clitocybe gibba</i>	Common Funnel
<i>Coprinus micaceus</i>	Glistening Inkcap
<i>Crepidotus variabilis</i>	Variable Oysterling
<i>Dacrymyces stillatus</i>	Common Jellyspot
<i>Daedaleopsis confragosa</i>	Blushing Bracket
<i>Flammulina velutipes</i>	Velvetshank
<i>Hypoxylon fragiforme</i>	Beech Woodwart
<i>Lepista flaccida/inversa</i>	Tawny Funnel
<i>Lepista nuda</i>	Wood Blewit
<i>Marasmius androsaceus</i>	Horsehair Parachute
<i>Mycena alcalina</i>	?
<i>Mycena arcangeliana</i>	Angel Bonnet
<i>Mycena pura</i>	Lilac Bonnet
<i>Nectria cinnabarina</i>	Coralspot
<i>Pleurotus cornucopiae</i>	Branching Oyster
<i>Pluteus cervinus</i>	Deer Shield
<i>Polyporus leptocephalus</i>	Blackfoot Polypore

<i>Pseudotrampetes gibbosa</i>	Lumpy Bracket
<i>Stereum hirsutum</i>	Hairy Curtaincrust
<i>Trametes versicolor</i>	Turkeytails
<i>Tremella mesenterica</i>	Yellow Brain
<i>Xylaria hypoxylon</i>	Candlesnuff

We are again grateful to Mary Larner for running another successful foray for us.

In October *Bovista nigrescens* (Brown Puffball) was also found close to the edge of the Lagoon during bulrush cutting work (JK) and *Clavatia gigantea* (Giant Puffball) was again found this year on the Willow Path near the Mike Sheldon Hide.

Earlier in the year a group of around 20 *Agrocybe praecox* (Spring Fieldcap) was found in the bottom corner of Tim's Field on 10th June (ML). Also recorded on the same date was *Bolbitius titubans*, formerly known as *B. vitellinus* (Yellow Fieldcap) down by the Dragonfly Ponds (ML).

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D Alred	DA	M Garland	MGa	A Patchett	AP
A Barber	AB	A German	AG	J Pickard	JP
G J Barlow	GJB	R German	RG	K Pickles	KP
S Beach	SB	M Gibson	MG	L Porter	LP
A Blackwell	ABI	L Gilhespy	LG	T Powell	TP
M Blake	MBI	A Grainger	A Gr	L Reddy	LR
J Brook	JB	S Griffiths	SG	L Rider	LRi
M Brook	MB	D Hall	DH	J Sadler	JS
S Brown	SBr	J Hall	JaH	K Sedden	KS
B Budd	BB	J Hall	JeH	P Sellers	PS
S A Carson	SAC	A Hardy	AH	C Sellers	CS
L Churm	LC	J Hayter	JH	A Shannon	AS
S Cockayne	SC	B Hewitt	BH	D Shepherd	DS
P Colley	PC	B Hind	BHi	A J Sherwood	AJS
J Conlin	JC	P Hulbert	PH	R Simpson	RS
JHA Conlin	JHAC	B Johnson	BJ	D Smith	DSm
J Cook	JCo	L Jones	LJ	M N Spence	MNS
T Cook	TC	J Kilner	JKi	J Stratford	J St
D Cowan	DC	P Kirkbride	PK	S Taylor	STa
E Cowan	EC	J Knapp	JK	S Tetlow	ST
G Cowap	GC	P Larner	PL	A Thompson	AT
L Deighton	LD	M Larner	ML	G Thompson	GT
P Deuble	PD	C Marshall	CM	N Tonge	NT
Y Driffield	YD	K Maunders	KM	D Vink	DV
C Ducker	CD	PJ Mill	PJM	M Vink	MV
D Eyre	DE	B Mills	BMi	D Walker	DW
S Exceli	SE	B Murphy	BM	V Walker	VW
S Fairclough	SF	P Murphy	PM	K Ward	KW
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