

# **CONTENTS**

THE BIRDS OF HOLES BAY – A MONTHLY ROUND UP FOR 2022	6
BIRDS RECORDED IN HOLES BAY AND UPTON COUNTRY PARK IN 2022	59
HOLES BAY BIRD CHECKLIST	124
VASCULAR PLANTS OF HOLES BAY BETWEEN THE EASTERN GATE OF UPTON COUNTRY PARK AND STERTE: APRIL-JULY 2022	130
FLORA RECORDED AROUND BASCOMBE'S WOOD AND POND - 2022	136
MOTHS RECORDED IN UPTON COUNTRY PARK AND HOLES BAY IN 2022	138
THE MOTHS OF UPTON COUNTRY PARK – A MONTHLY ROUND UP FOR 2022	157
DRAGONFLIES OF UPTON COUNTRY PARK AND HOLES BAY	171
SOME CHANGES IN THE SHORELINE FLORA AT UPTON COUNTRY PARK (NORTH-WEST HOLES BAY) BETWEEN 1988 AND 2018	180

# Cover photography by:

Peter Corbin: Black-tailed Godwit and Wigeon

Nick Woods: Sunrise over Holes Bay

**Cover design by Tony Grant** 

#### INTRODUCTION

Welcome to the 2022 Holes Bay Nature Park report.

The aim of this annual report is to document the year's wildlife sightings in Holes Bay and Upton Country Park. More than that, we hope to promote the area's importance for nature, and to allow as many people as possible to appreciate the richness of the local wildlife.

Please refer to the introduction to 2020's report (https://www.birdsofpooleharbour.co.uk/surveys/) for an overview of the history and ecology of the area.



Hornet (Vespa crabro)
© Tony Grant



Banks's Leaf Bettle (Chrysolina banksia) © Nick Woods



Minotaur Beetles (male and female) (*Typhaeus typhoeus*) © Tony Grant



Harvestman (*Leiobunum rotundum*)
© John Butler



Buff-tail/White-tail Bumblebee © Sally Grant



Large White Caterpillar and Brassica Shield Bug © Nick Woods

## Moth Trap "invaders" and other insects of UCP

Holes Bay is recognised nationally and internationally important as a wintering site for waders and wildfowl, so this year's report continues to concentrate on the birdlife with a full species-by-species bird report, as well as a month-by-month account of the birds recorded by Martin Adams. A total of 130 bird species were recorded in 2022, with last year's Tundra Bean Geese seen again in January. Worthy of a mention were the good numbers of wintering birds for which Holes Bay is so well known (for example Wigeon and Black-tailed Godwit); the breeding Peregrines and the occurrence of a number of species not often recorded in the area including Curlew Sandpiper, Kittiwake, Hen Harrier, Water Pipit and Marsh Tit.

In addition, Stephen F. Smith has collated a list of bird records dating from 1900, which highlights the species that have been lost to the area, but also those that are on the increase.

Increased sightings of White-tailed Eagles over UCP and Holes Bay bode well for the future, as does the success of the re-introduction of Ospreys to Poole Harbour.

Whilst regular moth surveys using light traps have been carried out at Upton Country Park since 2020, with 306 species of moth recorded during 2022, we also have some "historical" records dating from the 1970s onwards, which we have now been able to include in our statistics. See Sally Grant's account of the number and variety of moths recorded within UCP and Holes Bay, as well as a month-by-month report of our trapping sessions.

Stephen F. Smith continues with his reporting of the surprising variety of flora present along the Holes Bay Road as well as within the area of Bascombe Pond in Upton Country Park, and Martin Adams has also contributed a section on Dragonflies and Damselflies with stunning photographs.

Of great interest is a report on the changes in vegetation along a section of the shoreline of Upton Country Park between 1988 and 2018 by Nick Woods.

Apart from birds, moths and flora, there is a great deal more to be seen. This year Claire Ivey from the Bumblebee Conservation Trust (<u>Bumblebee Conservation Trust</u>), has carried out Bumblebee transects across the Park, along with one of our volunteers, John Butler, who has also carried out regular Butterfly transects. John recorded sightings of three infrequently-reported butterflies that were seen in 2022: Silver-washed Fritillary, Brown Argus and Purple Hairstreak. We also regularly see, and record, various "moth trap invaders" in the form of Crane Flies, May bugs, Parasitic Wasps, Hornets, Shield Bugs, Beetles etc.



Caddis (Halesus radiatus) © Nick Woods



Crane Fly (Tipula rufina) © Sally Grant



Tanner Beetle (*Prionus coriarius*) © Sally Grant



Red-legged Shield Bug (*Pentatoma rufipes*)
© Sally Grant

Moth Trap "invaders" and other insects of UCP

In 2023 we hope to re-run our reptile survey, monitor for bat activity around Upton House, and carry out regular bat surveys within the Park. At least four bat species were known to be present during 2022: Chiroptera sp., Common Pipistrelle, Noctule and Serotine, but we suspect there are more.

In order to preserve the information that we collate as a group, bird observations are recorded on BTO's BirdTrack, and other species are recorded on Living Record. This ensures that all records are available to Dorset Environmental Records Centre and other interested parties in the future, thereby contributing to the protection of the local area. Our team recorded over 600 species of plant and animal (including moths) on Living Record during 2022.

If you would like to contribute to these records, please share any wildlife sightings on our Twitter account @bayholes or email us at <a href="mailto:nick.woods4@btinternet.com">nick.woods4@btinternet.com</a>

The authors would like to acknowledge the assistance of Paul Morton (The Birds of Poole Harbour) and Geoff Upton (Dorset Bird Club), as well as Upton Country Park for hosting this report. Also, Adrian Bicker (Living Record) and Jez Martin (Bournemouth, Christchurch and Poole Council) for their ongoing support.

Martin Adams, John Butler, Sally Grant, Tony Grant, Jackie Hull, Nick Hull, Stephen F. Smith and Nick Woods

## THE BIRDS OF HOLES BAY – A MONTHLY ROUND UP FOR 2022

by Martin Adams

#### **JANUARY**



© Martin Adams

The year started with stunning numbers of birds wintering in Holes Bay. The monthly WeBS (Wetland Bird Survey) count recorded 7988 Waders, Wildfowl and Gulls in The Bay including 2671 Wigeon, 632 Teal, 1168 Dunlin, 484 Avocet, and 1098 Black-tailed Godwit. This total represented over a quarter of the birds recorded in Poole Harbour at the time!



© Martin Adams

Of all the waders in the Bay however, perhaps the most exciting was a single Common Sandpiper. Despite the name, as few as 50 are thought to overwinter in Britain, with the bird far more common locally as a passage bird in Spring or Autumn.



Common Sandpiper © Martin Adams

Looking closely for the Common Sandpiper had the benefit of turning up regular numbers of Turnstone along the Railway Embankment. A greater focus on the South West produced a few records of Spotted Redshank: once a far more common bird in the Northern sectors, and Common Snipe: never an easy bird to see in The Bay.

Brent Geese were also seen more frequently in the SW of The Bay, and there was a high count of 4 Red Breasted Mergansers and just 1 record of Goldeneye.



**Tundra Bean Goose © Richard Adams** 

Three Tundra Bean Geese were perhaps last year's birds of the year. They were still present on New Year's Day, before seemingly being scared off by a New Year's Day Fun Run, but returned briefly on the 30th.

A Glossy Ibis that was around Lytchett for a few weeks was seen heading to and from the direction of the Bay but sadly wasn't seen in Holes Bay itself.

There was a semi-regular Pied Wagtail roost of 100+ birds in the Asda carpark, and 300+ Starlings occasionally performed a mini murmuration - there were displays 1000s strong in the area in the 90's, reflecting the shocking decline of one of our most familiar birds.

A Blackbird also started singing in the Asda carpark, and birds were already singing in Upton CP. As well as the perennial Robins and Wrens, Great Tits and Song Thrush were heard singing and Great Spotted Woodpecker were drumming.

Flocks of 40+ Redwing was recorded in Upton CP, and a few Stonechat and small flocks of Siskin were notable winter visitors. A single Marsh Tit was the best record however, as these once common birds have declined by 80% since the 1960's.



Siberian Chiffchaff © Nick Woods

Chiffchaff - a species that was once only a summer visitor - were recorded in the relative warmth of the PC World Drain, including birds of the Siberian sub-species.

Finally, the grey winters wouldn't be complete without Kingfishers to brighten up the Bay. Although usually associated with the river banks where they breed, these iconic birds disperse to other water bodies in the winter months.

#### **FEBRUARY**



© Tanya Hart

February in Holes Bay generally means slightly less of the same, although 750+ Wigeon are still an impressive sight. They gradually came to be outnumbered by Teal as the month went on with counts of 300+ recorded.



Teal © Pete Corbin

Pintail and Shoveler were still present in good numbers at the start of the month. These ducks often show particularly well from The Stone Bench, although it is fortunate that they both have such distinct silhouettes when the low winter sun is behind them!

There were up to 12 Little Grebe, another wintering water bird that can be easily recognised by their silhouette which is fortunate as they generally hang out under the railway bridge, as far away from the shore as it's possible to get.



Redshank and Oystercatcher © Martin Adams

Avocet and Dunlin are usually quite late arrivals and early leavers, so 259 Avocet was a great count, although Dunlin were down to a mere 100 (and Godwit a mere 750!)

Snipe and Turnstone continued to be recorded more regularly, and there were still the occasional Lapwing in Holes Bay NW. Lapwing are another bird in dramatic decline: they formerly bred in the fields where the Upton bypass now runs, and such habitat loss together with changes in agricultural land use is the major reason for their decline.

There was a sighting of another declining winter visitor, Spotted Redshank on the 27th, and windy conditions brought in a flock of Cormorant on the 15th.



**Common Snipe © Martin Adams** 

In Upton CP, winter is notable for the roaming flocks of passerines. These birds can come from all over Europe and form mixed flocks in search of scarce seasonal foraging opportunities.

32 Redwing was the highest count this month - down on previous years. These birds are highly nomadic; however, the same Scandinavian breeding birds can be recorded in Britain one winter and Turkey the next.



**Nuthatch © Pete Corbin** 

There were 2 or 3 Brambling - a Scandinavian cousin of our resident Chaffinch, and 2 Firecrest on 7th along with counts of 21 Great Tit, 9 Nuthatch, 20 Robin and 26 Greenfinch.



**Grey Wagtail © Rene Goad** 

A few Grey Wagtails were sighted - a far more colourful bird than the name suggests. 7 Rooks were another good record, as they are surprisingly scarce in Upton CP, although they may be overlooked.

Like corvids, gulls tend to get overlooked, but The Bay sees big winter roosts with 1200+ Black-headed Gulls and over 200 Herring Gull logged. The Mediterranean Gulls started returning, and

there was a high count of 24 Common Gulls. Despite the name they aren't particularly common in The Bay, and only as a winter visitor.



**Common Gull © Martin Adams** 

A Red Kite passed over on the 2nd - these birds have staged a remarkable recovery in the last few decades in the M4 corridor, but have been slow to colonise further South, although they are becoming more common and now breed in North Dorset.

Finally, a sign of Spring approaching was at least 50 toads were logged returning to breed in Grove Pond.



**Common Toad © Nick Woods** 

#### **MARCH**



© Martin Adams

March saw the wildfowl numbers steadily decreasing as they started to make their way back to their breeding grounds, although there were still highs of around 250 Wigeon and 350 Teal!



Wigeon © René Goad

The story is slightly more complicated with the waders, with some leaving but the numbers of some boosted by birds that had wintered further South stopping off in the harbour.

This is especially true of the Godwits, with counts nearing 1000+ along with over 100 Redshank regularly recorded.



Dunlin and Back-tailed Godwit © Pete Corbin

The Avocet stayed slightly longer than last winter, until the 13th, with the last sighting of Dunlin on the 21st.

Common Sandpiper were more elusive, but one sighting in the middle of the month was probably still the wintering bird as it was a bit early for passage birds, and there was 1 Knot on the 4th.

Male Reed Bunting were seen near the Stone Bench and from Symes Road (where it is often a challenge to pick them out amongst the numerous House Sparrows)

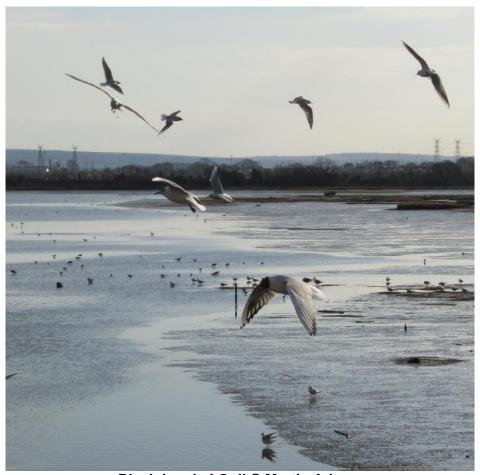


Reed Bunting © Martin Adams

13 Siskin on the 4th were still a winter flock, but the resident songbirds were singing conspicuously.

A Red Kite was seen on the 4th, and at the end of the month the Peregrine's behaviour indicated that they were on eggs with nest changeovers witnessed.

23 + Med Gulls represented a good pre-breeding flock, and a few Common Gulls were still present.



Black-headed Gull © Martin Adams

Sand Martin on the 21st and Sandwich Terns on the 29th were welcome signs of Spring arriving and Butterfly species that overwinter as adults such as Brimstone, Red Admiral and Small Tortoiseshell started to emerge.



Small Tortoiseshell © Martin Adams

## **APRIL**



© Martin Adams

Over 1500 Black-tailed Godwit at the start of the month was an excellent count for April, as the high spring tide pushed them off other parts of the harbour. These birds were probably a mixture of 'our' local wintering birds and passage birds from further South.



Whimbrel © Martin Adams

The picture is a lot simpler with The Whimbrel, a smaller cousin of the Curlew that we only see on passage: the first record of the year was on the 20th, with up to 7 present by the end of the month.



**Turnstone © Martin Adams** 

Turnstones were still present on the Railway Embankment, looking resplendent in their breeding plumage. As with many waders, we don't see the best of them for the majority of the time that they are in this country.



Oystercatcher © Martin Adams

One wader that is truly a summer resident is the Oystercatcher, and whilst many would be non-breeders, a pair once again attempted to breed on the roof of a building by the Twin Sails bridge, with birds also seen on the roofs around Asda and the RNLI buildings.

There were still 26 Wigeon at the start of the month, plus the odd Pintail, Teal and Shoveler holding on.

Shelduck were the most numerous waterfowl species, including a Common x Ruddy Shelduck hybrid which seemed to get around the harbour quite a bit during the month, a good indicator that these (and other) birds use more than one site.



Shelduck and probable Ruddy Shelduck x Common Shelduck hybrid © Nick Woods

There were a couple of sightings of Wheatear, another classic passage bird, and an Osprey passed through. Although Osprey had traditionally been a passage bird in the Harbour, 2022 would be the year that changed.



Peregrine © Peter Twamley

The Peregrines on Barclays House could be seen feeding chicks, although it remained to be seen how many had hatched as they remained tantalisingly out of sight on the balcony.

Up to 6 Linnets were seen on the scrubby margins between Half Moon and Lamb's Leas Field. These birds were more common when the SANG was farmed, so it is good to see them back as the management of the park changed.

The summer breeding migrants were also starting to return: Reed Warblers could be heard singing their distinctive songs around the edge of the Bay. 12 singing Chiffchaff and 17 Blackcap were recorded around Upton CP and a single Willow Warbler was logged. The latter is one of the most common migrants in Europe, although less so locally where they seem to have declined, perhaps due to climate change.

Swallows returned and wasted no time checking out the nesting site in the walled garden. This iconic bird of summer is also sadly in decline, so it was good to see them holding on here.

Of course, as well as the migrants, the resident birds were hard at work in the peak of the breeding season!



Song Thrush © Tony Grant

#### **MAY**

Holes Bay entered the summer doldrums, as far as birdwatching is concerned, with most of the waterfowl back on their breeding ground, and only a few Oystercatchers, Godwit, Redshank, Whimbrel and Curlew left to represent the waders.



Whimbrel © Sue Ketteridge

By the end of the month, it was just the 'Oycs' left, but this did include the Twin Sails breeding pair, who were now sitting on eggs.

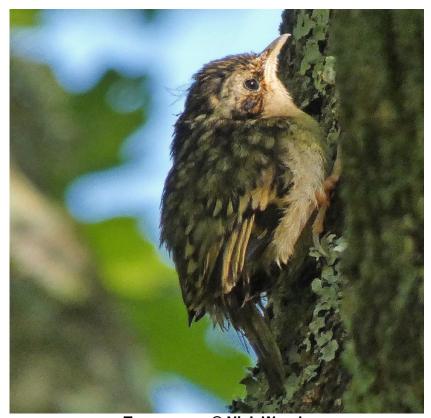
Of the resident wildfowl, Swans bred SW, and Mallard in the PC World Drain. Shelduck were still present but there was no sign of breeding yet. There was still the occasional Gadwall sighting, but no sign of breeding.



Mallard © Martin Adams

There were 16 Reed Warblers singing around Holes Bay and Upton CP and, more surprisingly, one in the power station site.

Starlings bred around the urban fringes, and juveniles of the common woodland species started to appear in Upton CP such as Robin, Song Thrush, Great Tit and Treecreeper.



**Treecreeper © Nick Woods** 

Willow Warbler were recorded singing again, raising the possibility of breeding and as usual there were a few Firecrest around including singing males.



Peregrine © Peter Twamley

The juvenile Peregrines started to show on the balcony as they grew rapidly, and it was confirmed that they had once again hatched 3 chicks.



Juvenile Peregrines © Martin Adams

The breeding season of the birds of course coincides with the emergence of the insects.



**Scarce Chaser © Martin Adams** 



**Beautiful Demoiselle © Martin Adams** 

Dragonflies started to emerge, including the Near Threatened Scarce Chaser and the stunning Beautiful Demoiselle which could be seen in moth-like flight along Dead Man's Ditch.



Small Blue Butterfly egg laying © Martin Adams



Mating Common Blue Butterfly © Martin Adams

The Blue butterflies dominated, with Holly, Common and most notably Small Blue Butterflies on the Power Station site and Holes Bay SE. These rare and localised butterflies have colonised these infilled verges and brownfield sites.



**Bank Vole © Martin Adams** 

And finally, a relatively rare rodent record - a Bank Vole by the Stone Bench!

## **JUNE**

Summer was in full bloom, with Pyramidal Orchids in profusion along the Holes Bay Road along with a few Bee Orchids.



Pyramidal Orchids © Martin Adams



Bee Orchids © Martin Adams

A lone male Wigeon was a reminder of the bountiful winter months, with a few Gadwall still around.



Wigeon © Martin Adams

There were 2 broods each of Shelducklings and Swans, plus breeding by Mallards and Moorhens. There was no sign of the nesting Oystercatchers by the Twin Sails bridge however, and unfortunately the nest must have failed.

Apart from the Oycs, the waders were represented by a single Common Sandpiper, a maximum of 10 Curlew and 34 Blackwit at the end of the month.



**Mute Swans © Nick Woods** 



Shelduck © Martin Adams

Young were seen of Robins, Great Tits, Blue Tits, Crows, Goldcrest and Great Spotted Woodpeckers.



Swallow © Rene Goad



Swallows © Rene Goad

The Swallows fledged young, and Reed Warblers were busy provisioning their young.



Reed Warbler © Rene Goad



Juvenile Peregrine © Martin Adams

Sadly, one of the juvenile Peregrines died after hitting a window, as had happened last year. One also ended up trapped behind a balcony, but fortunately the remaining 2 soon looked increasingly confident in flight.



Juvenile Peregrine (composite image) © Karyn Cuglietta

Kestrels were seen hunting over Upton Country Park, perhaps reflecting the changes in the management of the park with more areas being allowed to grow long.



**Kestrel © Rene Goad** 

More butterflies emerged, with good numbers of Marbled White, Meadow Brown and numerous Small and Essex Skippers: not always easy to tell apart without close views, but Essex Skippers seemed to dominate.



**Essex Skipper © Martin Adams** 

The larger Dragonflies started to emerge with Emperors patrolling the water bodies, but the highlight of the month was a Red-veined Darter, a scarce migrant to Britain seen in Holes Bay SE.



**Red-Veined Darter © Martin Adams** 

## **JULY**



© Martin Adams

Bird autumn begins in July, and Redshank could be heard piping, Blackwit chattering and Curlew calling again on The Bay.

Numbers quickly built up over the month, with 142 Redshank and 175+ Black-tailed Godwit and 50+ Curlew recorded by the end of the month, plus the first Dunlin of the season.



Redshank © Rene Goad

The Whimbrel returned on passage, and there were a few scarcer birds for The Bay, including a Greenshank, a summer plumage Knot and a Spoonbill.



**Knot © Martin Adams** 

Up to 3 Common Sandpipers could be seen regularly on the Railway Embankment and in the NE as they passed through.

For the local birds, it was still the breeding season, and Oystercatchers were discovered breeding on an Industrial Estate next to the Park.



**Oystercatcher © Nick Woods** 



Juvenile Moorhen © Rene Goad

Young were seen of Moorhens, Robins, Blackbirds, Great Tits, Dunnock and Pied Wagtails, and a juvenile Tawny Owl was heard calling.

Many birds were already on their way back to their wintering grounds. Hirundines (Swallows and Martins) massed over Upton CP, feeding up before crossing the channel and ultimately going onto Africa, along with smaller numbers of Swifts



Long- tailed Tit © Sue Ketteridge



Blackbirds © Nick Woods



Little Egrets/ Jackdaws © Martin Adams

Post-breeding Egret numbers were steadily increasing but the high spring tides brought an evening roost of over 100 on Pergins Island, along with over 200 Jackdaws and Crows.

The first Teal of the year was seen at the end of the month, with the rogue Wigeon still occasionally present, and Kingfishers started returning at the end of the month



## Kingfisher © Pete Corbin

Nightjar were seen fairly regularly in Upton CP, migrants that breed in the nearby heaths and hunt moths at night.



**Elephant Hawk Moth © Martin Adams** 

Gatekeeper Butterflies and Burnet Moths started to come out in force with over 200 Six-Spot Burnet Moths emerging virtually overnight along the Holes Bay Road and wasting no time in breeding.



Six-spotted Burnet © Martin Adams

Southern & Brown Hawker Dragonflies started to patrol the patch, and Small Red-eyed Damselflies were found on Grove Lake, a first for the site.

The Upton CP Bioblitz involved RSPB, Birds of Poole Harbour, ARC, Dorset Heaths engaging with the public and showing off the fantastic nature around the park and Bay.



Wasp Spider © Martin Adams



Parhelophilus versicolor © Martin Adams

### **AUGUST**



© Martin Adams

Despite the heatwave, bird autumn really kicked in, and Godwits especially started returning in numbers.



© Martin Adams

Many were juveniles, which means they had been born just a few months previously, and already had to make the flight here from Iceland. They may not have finished their journey either, as many birds at this time of year are just passing through on their way to wintering grounds even further South.



Juvenile Black-tailed Godwit © Martin Adams

Dunlin numbers edged into double figures, Spotted Redshank was found hiding in with the Common Redshank and Godwit, and a single Knot was seen a few times. There was a sighting of a summer plumage Grey Plover and a few of Ringed Plover: not common birds in the Bay.



**Common Sandpiper © Rene Goad** 

Common Sandpipers continued to be frequent, but Whimbrel finished their passage to their wintering grounds.

The first Shoveler and Pintail arrived back and numbers of Teal steadily increased while the rogue Wigeon was seen again before a few more joined it at the end of the month.



**Shoveler © Martin Adams** 

Kingfishers became a regular feature all around the Bay again, Little Egret continued to be numerous, and there was one sighting of a Great White Egret.



Wheatear © Nick Woods



**Spotted Flycatcher © Nick Woods** 

Flocks of Swallows fed up over the fields, and Willow Warblers were a frequent sight, along with Blackcaps and Chiffchaffs. There were a few Wheatear and Sedge Warbler sightings and Spotted Flycatchers returned to the Upton Park fields. PC World Drain as usual had the scarcer birds, with Redstart and Garden Warblers spotted.



**Swallow © Martin Adams** 

Two Ospreys were seen fishing in the Bay at the end of the month, and even more excitingly there were a couple of White-Tailed Eagle sightings

A few Yellow-legged Gulls were picked out amongst the usual suspects. These birds are fairly rare in Britain, but Holes Bay is a good place to see them - a count of 312 in 2001 is one of the highest counts ever registered in Britain



Yellow-legged Gull © Martin Adams

Autumn was now well underway, but still new species of insects were emerging or arriving, with Clouded Yellow butterfly and Migrant Hawker Dragonflies seen for the first time. Grayling and The Wall were found at the power station site but butterfly numbers dramatically tailed off as the heatwave brought an early end to their season.



## **Grayling © Martin Adams**



Migrant Hawker © Martin Adams

### **SEPTEMBER**



Osprey © Rene Goad

Ospreys hadn't really put in much of an appearance in 2021 after 2 excellent autumns, but they made up for it by being ever present for the best part of the month, with 1 or 2 seen fishing in The Bay and often roosting or eating their catch on Pergins Island.



Osprey © Rene Goad

It was a fantastic month for waders, with more diversity and greater numbers of the less common waders.



© Martin Adams

Black-tailed Godwit numbers didn't rise above 1000, in contrast to last September when they peaked at over 1200. Possibly the fine weather meant that birds stayed further North for longer.



Black-tailed Godwit (left) and Bar-tailed Godwit © Martin Adams

There were also up to 3 Bar-tailed Godwit present, a far rarer sight in The Bay. Unlike our Islandic 'Blackwit,' the 'Barwit' breed in Finland or Russia.

Redshank numbers continued to be strong, and we once again attracted a breeding colour ringed bird from nearby Hampshire.

We also saw the first Turnstone, plus Knot and Grey Plover, birds which would have come from far further afield and these high arctic breeders are not frequent visitors to the Bay.



Black-tailed Godwit and Dunlin © Rene Goad

Ringed Plover bred in Holes Bay as late as the 80s, but were only recorded once in the previous 2 years. This autumn however they were almost ever present along with decent numbers of Dunlin, and it was also a good month for Spotted Redshank and Greenshank sightings.

A few Avocet returned, slightly earlier than last year, and we had the first Snipe of the season in the South West.



Wigeon © Nick Woods

Wildfowl numbers also increased, although as with the Godwit there wasn't quite the same weight of numbers of Wigeon. Teal numbers were strong however, and Pintail and Shoveler steadily increased.

A single Tufted Duck and a rare sighting of Coot - species that usually prefer freshwater habitats - provided a bit of variety, along with the occasional Gadwall.

Once again, big flocks of Canadian Geese were present, along with increased numbers of Swans, and Grey Herons, including juveniles.



**Grey Heron © Martin Adams** 

Water Rail were either more numerous or more vocal, and even showed themselves once, a rarity for this normally elusive species.



Water Rail © Martin Adams

As well as the usual Grey Wagtails, a few Yellow Wagtail, a rarer bird in the recording area, were present in Upton Park Farm, characteristically feeding amongst the cattle. These birds would soon be in Africa, feeding amongst the Antelope there!



Yellow Wagtail © René Goad

Large flocks of Swallows and House Martin continued overhead, with Willow Warbler, Chiffchaff, Blackcap, Stonechat, Wheatear, Spotted Flycatcher and a Common Redstart amongst the other birds recorded passing through.



Wheatear © Martin Adams

A White-tailed Eagle was again logged on the 24th, something that would once have been a once in a lifetime record.

Once again there was the occasional Yellow-legged Gull and a few Sandwich Terns.



Yellow-Legged Gull © Martin Adams

#### **OCTOBER**



© Martin Adams

October sees the winter bird numbers really start to take off and the ploverfest continued with very respectable maximums of 42 Ringed Plover and 11 Grey Plover!

Dunlin numbers also passed 600, in contrast to last September's high count of 38, with a few Curlew Sandpipers being picked out amongst the flock.

The increase in small waders was extraordinary, although once again there were less Black-tailed Godwit than at the same time last year.



**Curlew Sandpiper © Nick Woods** 

Spotted Redshank and Greenshank were once again logged, and Knot continued to be a regular feature, with a small flock almost ever present.

Avocet numbers passed 60, and there were a couple of late records of Common Sandpiper.

Wigeon numbers passed the 1000 mark by the end of the month as the drakes of all species started to show their breeding plumage, with the Pintail looking particularly princely.

It was a good autumn for Redwing passage, with birds heard 'seeping' as they passed over at night, and logged around Upton CP in small numbers.

5 Sandwich Terns turned up in poor weather in the South East, but even more unusual were 2 very late Swifts on the 24<sup>th</sup>.

Yellow-legged Gull was once again logged - there is a possibility there were more in the flocks and roosts (along with who knows what else!)



Marsh Harrier © Andy Collier

Kestrels were once again in Upton Country Park. A Red Kite was also logged but a Marsh Harrier was a far rarer sight.

There were still a few Dragonflies around in the unusually mild weather, plus the occasional Clouded Yellow butterfly. Finally, a seal was spotted in the SE.



© Martin Adams

#### **NOVEMBER**

Spotted Redshank were the species of the month, with 1 or 2 seen on most visits to the South West plus a few records in the North. 16 records in November compared fantastically to just 8 in the whole of 2021!



Spotted Redshank © Rene Goad

Snipe were also spotted more frequently in the South West, and there was still the occasional Grey Plover about. The Ringed Plover and Knot seemed to have moved on, however.

A few Common Sandpiper sightings suggested that they may become the regular feature they had been in the winter of 2021. Lapwing became regular in small numbers, and Turnstone turned up a few times in the South West.

Avocet numbers passed 250, a very healthy figure for November.



**Avocet © Mark Wright** 

Wigeon numbers passed 1500, and 120 Shovelers was another good count.



Sandwich Terns © Andy Collier

Sandwich Terns turned up twice in the relatively sheltered South West amid strong Westerly winds, then were back again in calmer weather at the end of the month.



Cormorants © Martin Adams

There were also flocks of over 150 Cormorants hunting in The Bay, mainly in the SE, and on one occasion roosting in the NE. Hunting in flocks is characteristic of continental birds belonging to the sub-species *sinensis* 



**Shag © Martin Adams** 

A single Shag, a smaller cousin of the Cormorant, was also spotted in the SE, the first Holes Bay record since Jan 2020. These birds are common in Poole Harbour in the winter, but don't seem to make it further inland to Holes Bay very often.



Kittiwake © Andy Collier

Kittiwake was an even rarer visitor, with one seen in Holes Bay NE. Sadly, it seemed lethargic and was possibly suffering from Avian Influenza.

A few wintering Brent Geese and Great Crested Grebe turned up in the south of The Bay.

A Marsh Harrier was seen on 2 occasions, amid an increase in Poole Harbour wintering numbers, and a Hen Harrier on the 12th was an even rarer visitor.

Kestrels were also seen hunting in the South East, as they were last autumn, and once again seen on a residential block in Holes Bay South.

Firecrest became more numerous around Upton CP

Jackdaws and Wood Pigeons were found roosting in Pergin's Island in huge numbers, with well over 1000 of each, and there were flocks of over 500 Starlings in the SE.





© Martin Adams

# **DECEMBER**



© Martin Adams

Winter finally arrived with a vengeance, with snow, ice and freezing temperatures followed by strong winds and heavy rain



© Martin Adams

Godwit numbers increased after the cold spell, nearing 1000, with Avocet, Dunlin and Redshank numbers continuing to be strong.



**Avocet © Pete Corbin** 



**Greenshank © Martin Adams** 

A Common Sandpiper was again spotted several times. There was a Green Sandpiper in the North West, and there were a few Greenshank records. The Spotted Redshank seemed to have moved on however, although one turned up at the end of the month.



Oystercatchers © Martin Adams

A high tide roost of over 100 Oystercatchers on the railway embankment didn't quite match previous year's counts. A new behaviour observed was the Oycs moving between the boat graveyard and the school fields in the SW, with over 80 logged



Wigeon © Martin Adams

Wildfowl numbers continued to be spectacular, with Teal numbers nearing 1000 - Indeed, as these small ducks often hang around the edges there was almost certainly more than the 996 recorded!



Pintail © Rene Goad



**Tufted Ducks © Martin Adams** 

Pintail numbers passed 80, and 37 Tufted Ducks turned up in the North East when the lakes froze over in the cold spell, a significant count for The Bay.



Spoonbill © René Goad

Another good record was a single Great White Egret on the 5th. A small flock of Spoonbill also appeared in the NE on 2 occasions early in the month, although they didn't reappear when it got really cold, which is usually the best time to see them. There were a few Great Crested Grebe South of the Railway embankment and 20 Brent Geese returned to the South West.

Up to 9 Chiffchaff were recorded in the relative warmth of the PC World Drain, and there was a rare winter record of a Willow Warbler, a species that should be South of the Sahara at this time of year! A Cetti's Warbler at the end of the month was a welcome return for a species that was ever present (and most likely bred) last summer but was more elusive this year.



Willow Warbler © Ian Ballam

Occasional Grey Wagtail and the ever-present Kingfishers gave some colour to the grey winter months, and Rock Pipits became more common.



Grey Wagtail © Pete Corbin

With The Bay once again full of wintering birds, we had come full circle. Meanwhile, in the scrub around Holes Bay NE, a Song Thrush was already singing in the dark, cold mornings, a reminder of the change and renewal to come.



Black- tailed Godwit © Martin Adams

### **BIRDS RECORDED IN HOLES BAY AND UPTON COUNTRY PARK IN 2022**

## Martin Adams, Sally Grant, Jackie Hull, Stephen F. Smith and Nick Woods

The following list of birds includes all those species known to have occurred in the recording area in 2022.

Records have been obtained from individual recorders, from accessible records on the E-bird online recording system, from the Websites maintained by the Birds of Poole Harbour and the Dorset Bird Club. In some cases, records have been downloaded by observers from the Birdtrack online recording system managed by the British Trust for Ornithology.

The Holes Bay Nature Park was established in 2015 by a partnership of the Poole Harbour Commissioners, Dorset Wildlife Trust, and the Borough of Poole (now Bournemouth, Christchurch and Poole Council).

Upton Country Park is owned and managed by Bournemouth, Christchurch and Poole Council. A map showing the names used for different locations within the Country Park is included within the report. There is no public access to the fields of Upton Park Farm.

#### Abbreviations:

BoPH - Birds of Poole Harbour

BTO – British Trust for Ornithology

WeBS – Wetland Bird Survey (carried out by volunteers from the BTO)

SANG – Suitable Alternative Natural Greenspace

This report is based on records and information from the following observers:

James Adams, Martin Adams, Tracy Akehurst, Ian Alexander, Andew Allen, Peter Ashley, Birdguides Ltd, Birds of Poole Harbour, Stephen Bean, Michael Beer, John Butler, Catherine Causebrook, Zoe Chapel, Andy Collyer, Peter Corbin, Michael Cross, Tina Dawkins, David Foster, Alastair Fraser, Frankie Gamble, Tony Gaston, Rene Goad, Sally Grant, Tony Grant, Tanya Hart, Robin Heawood, Jolan Hinsch, Jackie Hull, Bryony Jenner, Tamara Kaleel, Samuel Levy, Ian Lewis, James Lidster, Peter Moore, Garry Moors, Paul Morton, Nick Mudge, Charles Nelson, Roly Pitts, Andy Renton, Gary Robinson, Steve Sanson, Stephen F. Smith, Phil Stanley, Bob Steedman, Helen Stone, Bruce Townsend, Graham Twigg, Steve Violette, Joe Walston, Holes Bay WeBS counters, (BTO), David White and Nick Woods.

The following photographers have also provided photos for use in the report:

Martin Adams, Richard Adams, Ian Ballam, Andy Collyer, Pete Corbin, Karen Cuglietta, Rene Goad, Sally Grant, Tony Grant, Tanya Hart, Sue Ketteridge, Peter Twamley, Nick Woods, Mark Wright.

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### Brent Goose (Branta bernicla)

## Still the scarcer of the two 'black geese' regularly recorded, but increasing in Holes Bay.

Max	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2020	12	-	-	-	-	-	-	-	-	-	-	-	12
2021	26	8	7	10	-	-	-	-	-	-	-	1	-
2022	56	15	13	13	-	-	-	-	-	-	-	5	10

The 'Total' column in the table above shows that records have become steadily more frequent over the past three years. Almost all records were in the SW sector of Holes Bay, and counts in winter 2022 – 23 were so consistent that the same group of birds appeared to be involved. The rise in numbers may reflect increased coverage of the SW sector in recent years.

Extreme dates in 2022: 25<sup>th</sup> March (2) and 19<sup>th</sup> November (5).

### Canada Goose (Branta canadensis)

The commonest of the 'black geese', with flocks in the hundreds sometimes seen in Holes Bay and flocks also feeding on the fields at Upton Country Park; at least one pair has bred at Upton Country Park in the past (2011).



© Pete Corbin

#### Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
20	9	4	2	34	200	168	20	208	86*	78	172
(16 <sup>th</sup> )	(19 <sup>th</sup> )	(15 <sup>th</sup> )	(10 <sup>th</sup> )	(26 <sup>th</sup> )	(15 <sup>th</sup> )	(1 <sup>st</sup> )	(7 <sup>th</sup> )	(10 <sup>th</sup> )	(9 <sup>th</sup> )	$(27^{th})$	(5 <sup>th</sup> )

Combined Holes Bay counts by WeBS counters shown by \*

The table shows the usual fall in numbers in spring, when birds are on their breeding areas. There were records of confirmed breeding in 2022, though a pair were seen mating in SW Holes Bay on 11<sup>th</sup> March 2022. There has also been a slight overall drop in records over the past three years.

#### Barnacle Goose (Branta leucopsis)

A rare winter visitor or passage migrant to Dorset, though feral birds may also occur.



© Nick Woods

As in previous years, a single bird in a flock of Canada Geese. The date of 26<sup>th</sup> May 2022 strongly suggests that this was a feral individual.

### **Greylag Goose** (Anser anser)

The only 'grey goose' regularly recorded, the birds being part of a widespread feral population small numbers sometimes seen in Holes Bay, often with Canada Geese. Birds have been colour-ringed in Poole Park in a study of the local population (sightings of such birds can be reported to <a href="mailto:pooleparkgreylags@gmail.com">pooleparkgreylags@gmail.com</a>).

A flock of 20 flew over Holes Bay on 12<sup>th</sup> June 2022. Otherwise, 1-2 birds noted in January, September, October and November 2022.

#### **Tundra Bean Goose** (Anser serrirostris)

#### A very rare winter visitor to Dorset, with very few recent records from Poole Harbour.

The family group of three originally found on 20<sup>th</sup> December 2021 remained until 1<sup>st</sup> January 2022, being last seen in the large field at Upton Farm before being disturbed by the Upton Country Park Fun Run. After a report from Brand's Bay the following day, they disappeared from the Poole area until the end of the month, when they were seen at Lytchett Fields on 29<sup>th</sup> and 30<sup>th</sup> Jan. During these two days the group fell from three birds to two. These two were last recorded on 30<sup>th</sup> January at Upton Country Park.



© Martin Adams

### **White-fronted Goose (Anser albifrons)**

A rare winter visitor and passage migrant to Poole Harbour, with few if any recent records from Holes Bay.

Not recorded in Holes Bay in 2022.

Mute Swan (Cygnus olor)

A few pairs often breed around Holes Bay, with larger numbers found in winter.





© Martin Adams

© Sue Ketteridge

Three pairs bred in 2022, with 7 young first noted in SW Holes Bay on 24th May.

## Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
24*	13	20*	12	21	14	14	15	17	20	33*	47*
$(16^{th})$	(19 <sup>th</sup> )	$(27^{th})$	(30 <sup>th</sup> )	(5 <sup>th</sup> )	$(28^{th})$	$(20^{th})$	(7 <sup>th</sup> )	(29 <sup>th</sup> )	$(30^{th})$	(6 <sup>th</sup> )	(4 <sup>th</sup> )

Combined Holes Bay counts by WeBS counters shown by \*

The total of monthly maxima has fallen for the second year running.

#### **Black Swan (Cygnus atratus)**

An introduced Australian species, now seen in small numbers in Poole Park and at other sites across Dorset.

Not recorded in Holes Bay in 2022.

### Egyptian Goose (Alopochen aegyptiaca)

A species introduced into Britain and now spreading, one or two occasionally recorded in recent years.

Not recorded in Holes Bay in 2022.

Shelduck (Tadorna tadorna)

A few pairs breed around Holes Bay or nearby, with small groups of young birds seen in summer; flocks in winter may increase in cold weather (650 recorded in Holes Bay in 1987).



© Martin Adams

Breeding: records of young in 2022 peaked at 16 (in two broods) in the NW sector on 9<sup>th</sup> June; the latest record of young was 5 on 7<sup>th</sup> August 2022.

Monthly maximum counts:

Mean	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
56	199*	91*	122	48	38	20	9	7	4	10	21	97*
	(16 <sup>th</sup> )	$(27^{th})$	(15 <sup>th</sup> )	(13 <sup>th</sup> )	(8 <sup>th</sup> )	(9 <sup>th</sup> )	(25 <sup>th</sup> )	(9 <sup>th</sup> )	$(22^{nd})$	(20 <sup>th</sup> )	(17 <sup>th</sup> )	(23 <sup>rd</sup> )

Combined Holes Bay counts by WeBS counters shown by \*

The means of monthly maxima over the past three years are as follows:

2020: 64

2021: 49

2022: 56

These suggest that the local population is currently stable after a serious drop over the past twenty years.

In addition, a bird considered to be a hybrid Shelduck X Ruddy Shelduck was noted on four dates in April 2022.

## Shoveler (Spatula clypeata)

## A regular winter visitor to Holes Bay with numbers increasing.



© Martin Adams

Numbers remain at a healthy level in Holes Bay, with a maximum of exactly 130 in each of the past three calendar years.

#### Monthly maximum counts:

Mean	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
42	55*	61	43	4	-	-	-	1	21	66	126	130*
	(16 <sup>th</sup> )	(5 <sup>th</sup> )	(3 <sup>rd</sup> )	(5 <sup>th</sup> )				(9 <sup>th</sup> )	(21 <sup>st</sup> )	(29 <sup>th</sup> )	(8th)	(4 <sup>th</sup> )

Combined Holes Bay counts by WeBS counters shown by \*

The extreme dates were 20<sup>th</sup> April (1) and 9<sup>th</sup> August (1).

The means of monthly maxima over the past three years have been as follows:

2020: 40

2021: 31

2022: 42

Gadwall (Mareca strepera)

Mainly a winter visitor to Holes Bay, usually in small numbers.



© Martin Adams

2022 was a good year for this species, with records in all months and the first double-figure count for three years. A pair was present in the PC World channel in April and May, but there was no further evidence of breeding.

#### Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
10*	3	2	2	4	6	1	5	2	1	2	6

Combined Holes Bay counts by WeBS counters shown by \*

## Wigeon (Mareca penelope)

A winter visitor to Holes Bay, with numbers greatly increasing in recent years to outnumber all the other duck species, and with counts of over 1,000 often made. The bird's loud whistling call is a characteristic sound on the salt marshes.



© Mark Wright

A new Holes Bay record count of 2671 in January 2022, exceeding the previous record of 2534 in December 2018. Approximately half of the Poole Harbour population of Wigeon now winters in Holes Bay.

Mean	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
687	2671*	750	256	26	1	1	1	10	482	990	1552*	1503*
	(16 <sup>th</sup> )	(5 <sup>th</sup> )	(4 <sup>th</sup> )	(1 <sup>st</sup> )				(31 <sup>st</sup> )	(24 <sup>th</sup> )	(31 <sup>st</sup> )	(6 <sup>th</sup> )	(4 <sup>th</sup> )

Combined Holes Bay counts by WeBS counters shown by \*

The table above includes a lingering bird which was present throughout May, June and July.

The comparative figures for the past three years in Holes Bay are now as follows:

		Mean
Year	Year	monthly
	Maximum	Maximum
2020	2094	708
2021	2324	719
2022	2671	687

**Mallard** (Anas platyrhynchos)

The only duck known to breed in the area, with pairs often present on the larger ponds in Upton Country Park and small flocks also seen in Holes Bay. A variety of domesticated birds also occur.



© Mark Wright

Breeding: 10 young seen in PC World Channel on 17<sup>th</sup> May 2022, and 2 young in the Duck Pond in Upton CP on 1<sup>st</sup> July.

Monthly maximum counts:

<u> </u>											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4	9	6	3	14	9	3	55	54	27	9*	18*
(4 <sup>th</sup> )	(25 <sup>th</sup> )	(17 <sup>th</sup> )	(8 <sup>th</sup> )	(17 <sup>th</sup> )	(6 <sup>th</sup> )	(20 <sup>th</sup> )	(20 <sup>th</sup> )	(2 <sup>nd</sup> )	(9 <sup>th</sup> )	(6 <sup>th</sup> )	(4 <sup>th</sup> )

Combined Holes Bay counts by WeBS counters shown by \*

## Pintail (Anas acuta)

A winter visitor to Holes Bay with numbers increasing in recent years and counts of 50 or more birds now regularly being made.



© Sue Ketteridge

#### Monthly maximum counts:

Ja	n Fe	eb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
65	6	7	37	6	-	-	-	1	14	20	31	85
(21	<sup>st</sup> ) (12		$(10^{th})$	(1 <sup>st</sup> )				(28 <sup>th</sup> )	(19 <sup>th</sup> )	$(27^{th})$	$(27^{th})$	(5 <sup>th</sup> )

Combined Holes Bay counts by WeBS counters shown by\*

Overall occurrences of Pintail continue to increase in Holes Bay, and the species now ranges widely over the NW and NE sectors. The annual means of the monthly maxima over the past three years are as follows:

2020: 15 2021: 23 2022: 27

### Teal (Anas crecca)

In winter usually the second most abundant duck (after the Wigeon) in Holes Bay, with several hundred often present.



© Rene Goad

#### Monthly maximum counts:

Mean	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
273	632* (16 <sup>th</sup> )	137 (17 <sup>th</sup> )	344 (12 <sup>th</sup> )	147 (8th)	-	1	-	80 (30 <sup>th</sup> )	300 (15 <sup>th</sup> )	243 (3 <sup>rd</sup> )	400 (27 <sup>th</sup> )	996* (4 <sup>th</sup> )

Combined Holes Bay counts by WeBS counters shown by \*

Numbers of this species have increased over the past three years, and the annual means of the monthly maxima are as follows:

2020: 181 2022: 273 2021: 167

## Pochard (Aythya farina)

Once a regular winter visitor to Holes Bay, occurring in most years, with over 100 birds recorded in the 1987 cold spell, now rarely seen and then usually in very small numbers.

One record of 6 birds at Upton Country Park (probably in Holes Bay) on 28th September 2022.

## Tufted Duck (Aythya fuligula)

A few birds usually occur in Holes Bay in the winter, though this species and the other 'diving ducks' are much less abundant than the various species of 'dabbling duck'.



© Martin Adams

The year began in the usual way, with 1-3 on five dates between January and September. In December 2022, however, there was an unexpected build-up of numbers in the NE sector, peaking at 37 on 17<sup>th</sup> and trailing off to 3-4 at the month's end. The apperance of the flock in Holes Bay may have been be a response to cold weather: similar conditions in February 1991 produced a flock of 195.

## Scaup (Aythya marila)

A scarce winter visitor to Holes Bay, not recorded at all in some years, once present birds maybe present for some time.

A long-staying small party was regularly reported from 21<sup>st</sup> January to 29<sup>th</sup> February 2020, reports were usually of 4 birds (with a maximum on any date of 5) but detailed records showed that at least 2 males and 4 females were involved. Most frequently seen south of the railway, although birds did occasionally venture into the northern section of the Bay.

Not recorded in Holes Bay in 2022.

Goldeneye (Bucephala clangula)

A regular winter visitor in small numbers to Holes Bay.

Sadly, the decline in this species in Poole Harbour as a whole is reflected in Holes Bay. The only records in 2022 were of one bird on 17<sup>th</sup> Jan and 2 in the NE sector on 20<sup>th</sup> Dec.

## Goosander (Mergus merganser)

An uncommon winter visitor and passage migrant in Dorset; rarely if ever recorded in Holes Bay.

Not recorded in Holes Bay in 2022.

**Red-breasted Merganser** (Mergus serrator)

Regular winter visitor in small numbers to Holes Bay.



© Rene Goad

Small numbers recorded in the winter months, with most birds south of the railway.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max	4	2	4	-	-	-	-	-	-	-	-	1
	(3 <sup>rd</sup> )	(19 <sup>th</sup> )	(8 <sup>th</sup> )									(17 <sup>th</sup> )

Bird-	8	3	15	-	-	-	-	-	-	-	-	1
days												

### Pheasant (Phasianus colchicus)

Formerly seen regularly at Upton Country Park (prior to the conversion of much of the adjacent farm to SANG), now rarely reported from the recording area.

One record - recorded as present in Holes Bay to the south of the railway line on 13<sup>th</sup> April 2022

## Nightjar (Caprimulgus europaeus)

Although breeding widely on local heathlands a bird rarely if ever reported from the recording area, though given its crepuscular or nocturnal habits, it may be under-recorded.

Single birds were seen in Upton Country Park at dusk or after dark on 13th, 28<sup>th</sup> and 29<sup>th</sup> June 2022, 3<sup>rd</sup> and 22<sup>nd</sup> July 2022 and 11<sup>th</sup>, 18<sup>th</sup> and 23<sup>rd</sup> August 2022. This is an increased number of sightings compared to 2021, though this may reflect the number of evening visits being made

### Swift (Apus apus)

A summer visitor to Britain which has declined greatly in recent years. Birds may be seen feeding over the recording area and measures are being taken to provide safe nesting sites on buildings nearby.

Recorded from 17<sup>th</sup> May to 8<sup>th</sup> August 2022 (14 dates), usually in small numbers (1-5) though maximum number recorded was 20 on 27<sup>th</sup> July 2022. Possibly under-recorded. As in 2021, around half the records were of birds seen around Barclays House in Serpentine Road.

#### Rock Dove/Feral Pigeon (Columba livia)

Feral pigeons, in various colour patterns, are thought to breed on many buildings and bridges (including Poole Bridge) and along the railway line around the recording area.



© Sue Ketteridge

Recorded in every month and usually present in the urban areas where breeding probably occurs; maximum number recorded 37 on 30<sup>th</sup> October 2022. A small flock of white 'doves' sometimes seen in the northern part of Holes Bay.

#### Stock Dove (Columba oenas)

Less conspicuous, lacking the white wing bars of the more abundant Wood Pigeon, the Stock Dove is found in much smaller numbers but its distinctive song can be heard from many wooded areas.



© Nick Woods

Recorded in every month, except October. The largest count recorded was 8 in Upton Country Park on 1<sup>st</sup> and 20<sup>th</sup> February 2022, but probably overlooked amongst the commoner Wood Pigeon. Singing birds frequent and widespread in the woods and gardens of the Park, but no conclusive evidence of breeding.

### Wood Pigeon (Columba palumbus)

A common breeding species, the Wood Pigeon also forms feeding flocks, often seen in the fields at Upton Country Park. Flocks apparently migrating sometimes recorded with a large roost sometimes noted on Pergins Island. Probably under-recorded.



© Rene Goad

Always present at Upton Country Park; almost certainly bred with recently fledged young recorded in Upton Country Park on 15<sup>th</sup> June and 5<sup>th</sup> July 2022. Counts of 50 or more included 51 on 4<sup>th</sup> March 2022, 94 on 24<sup>th</sup> October 2022 (aggregate total for Upton Country Park), 700 at the Pergins Island roost on 6<sup>th</sup>, 1000+ on 24<sup>th</sup> and 50 on 27<sup>th</sup> November 2022 with 79 on 5<sup>th</sup> December 2022.

**Collared Dove** (Streptopelia decaocto)

## Small numbers seen around the recording area, may breed.



© Martin Adams

Relatively few records, recorded in all months except October-December at various locations including the shoreline, the west side of the SANG (near Roper's Lane) and around the RNLI buildings. Records usually of 1-3 birds with a maximum of 6 recorded on 16<sup>th</sup> January 2022 and 10<sup>th</sup> February 2022. No evidence of breeding, but regular presence of birds in particular locations suggest this may occur.

### Water Rail (Rallus aquaticus)

A secretive bird, rarely seen, its presence often revealed by its squealing call, present in the reed beds around Holes Bay and occasionally on the ponds in Upton Country Park.



© Martin Adams

Recorded in all months of the year, usually 1-3 birds. Most records from the main reed beds around Holes Bay with birds also recorded from the duck pond and the Grove Pond (2 occasions) in Upton Country Park. No definite evidence of breeding though it is likely that this did occur; most records refer to birds heard.

# Moorhen (Gallinula chloropus)

A few pairs breed around Holes Bay and on several of the ponds at Upton Country Park.



© Rene Goad

Recorded in Upton Country Park or around the Bay in all months of the year. Breeding birds were reported from the Grove Pond and the duck pond (both in Upton Country Park) with at least two broods seen on the former on1<sup>st</sup> July 2022. Birds may also have bred at other sites around the Bay. Maximum number recorded was 8 (including 3 juveniles) in Upton Country Park on 5<sup>th</sup> July 2022.



©Nick Woods

Coot (Fulica atra)

Occasionally seen in Holes Bay and thought to have previously bred on the Grove Pond in Upton Country Park.

Records, usually of single birds, on 17<sup>th</sup> January 2022, 19<sup>th</sup> September 2022, 15<sup>th</sup> November 2022 (2 birds) and 20<sup>th</sup> & 23<sup>rd</sup> December 2022. Most records from Holes Bay with one from Upton Country Park.

Little Grebe (Tachybaptus ruficollis)

# A small flock regular in Holes Bay (often seen near the railway line) in the winter, thought to have previously bred on the pond in the Grove at Upton Country Park.

Small numbers in autumn/winter/spring, with last spring record 2 on 21<sup>st</sup> April 2022 and first autumn record 1 on 18<sup>th</sup> August 2022; usually seen close to the railway in Holes Bay.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12	10	4	2	-	-	-	1	3	10	8	14*
(16th	(3rd)	(7th)	(21st)				(18th	(20th)	(31st)	(7th &	(4th)
&							&			27th)	
29th)							20th)			-	

Combined Holes Bay counts by WeBS counters shown by \*

# Great Crested Grebe (Podiceps cristatus)

Small numbers present in Holes Bay, mainly in the winter but is seen almost the whole year. Nearby, birds regularly breed on sites such as Hatch Pond.

One or two birds reported in Holes Bay (usually south of the railway) on 11 dates in January-March and 8 dates in November-December 2022.

# Oystercatcher (Haematopus ostralegus)

Occasional (usually unsuccessful) breeding bird around the margins of the Bay. Present all year round but more common in winter. The wintering population in Poole Harbour has declined since 1990.



© Martin Adams

Recorded from all months of the year in Holes Bay, monthly maxima given below.

As last year, a pair attempted to breed on the roof of a building by the Twin Sails Bridge, first seen on 17<sup>th</sup> April 2022. No chicks were seen, and the nest failed again. The building has now been demolished. However, 2 chicks were seen on the roof of the RNLI building on the 21<sup>st</sup> June 2022 and 1 on the roof of a building on Upton Industrial Estate on 4<sup>th</sup> July 2022. It is not known if these nests succeeded.

In winter, large high tide roosts sometimes assemble on the south side of the railway embankment on the east side of the Bay – the high counts in January, February and December all refer to these roosts. Flocks were also recorded this year feeding on the fields of The Cornerstone Academy and

roosting in the 'boat graveyard' between Cobb's Quay and The Power Station site in Holes Bay SW, and birds were occasionally seen on the verges in Holes Bay SE.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
79	71	34	11	10	3	8	9	27*	40*	55*	101
(26/1)	(3/2)	(14/3)	(19/4)	(10/5)	(3/6)	(25/7)	(7/8)	(11/9)	(9/10)	(6/11)	8/12

Combined Holes Bay counts by WeBS counters shown by\*

# **Avocet** (Recurvirostra avosetta)

Appearing in late autumn, flocks in Holes Bay can number over 200 in winter with numbers increasing in recent decades. Poole Harbour is one of the most important wintering sites in the UK for Avocet.



© Mark Wright

Large numbers in winter, mainly in northern parts of Holes Bay. An extraordinary count of 484 by the WeBS counters on 16<sup>th</sup> January 2022 is easily the highest number recorded. This count was an outlier, although counts of 250+ were regular. The last Winter sighting was on 13<sup>th</sup> March 2022 with birds returning from 29<sup>th</sup> September 2022 – later and earlier than last year's dates of 1<sup>st</sup> March 2021 and 6<sup>th</sup> October 2021.

Unlike most wader species they tend to stay in The Bay on all tides, presumably as they are less reliant on exposed mud.

Monthly maximum counts:

			• •								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
484*	272	44	-	-	-	-	-	7	62	257	281*
(16 <sup>th</sup> )	(17 <sup>th</sup> )	(3 <sup>rd</sup> )	-	-	-	-	-	(29 <sup>th</sup> )	(31 <sup>st</sup> )	(27 <sup>th</sup> )	(4 <sup>th</sup> )

Combined Holes Bay counts by WeBS counters shown by \*

## Lapwing (Vanellus vanellus)

A winter visitor to Holes Bay in small numbers, often best seen from the boardwalk in Holes Bay NW. Has been seen in the fields at Upton Country Park, especially in prolonged cold spells. Formerly bred on the fields were the Upton bypass now goes through.

23 records. 9 from the first winter period up until 27<sup>th</sup> February 2022, with a Max of 8 on 2<sup>nd</sup> February 2022. There were 2 outliers on 4<sup>th</sup> July 2022, then 13 records in the second winter period starting from the 20<sup>th</sup> October 2022. One record in the ASDA Saltmarsh in the far SE of the Bay in the cold spell during December 2022. There had also been 23 records in 2020, but 30 records in 2021.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
5	8	-	-	-	-	2	-	-	1	2	2
M	(10/2)	-	-	-	-	(4/7)	-	-	(20/10)	(18/9)	(2/12)

m = multiple dates

# Grey Plover (Pluvialis squatarola)

# A passage migrant or winter visitor to Holes Bay, birds being reported more often in recent years.

No records in the first winter period then, as with many of the smaller waders, an extraordinary autumn: There were 30 records with a high count of 11 on the 3<sup>rd</sup> October 2022, compared to just 3 records of single birds in the whole of 2021.

# Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-	-	-	-	-	-	-	1	4	11	1	1
-	-	-	-	-	-	-	М	(30/9)	(3/10)	М	M

M = multiple dates

# Ringed Plover (Charadrius hiaticula)

# Usually an occasional visitor to Holes Bay, mainly as a passage migrant with small flocks rarely seeming to stay long.

Recorded once in 2020 and not at all in 2021. By contrast, in 2022 there were 18 records between 18<sup>th</sup> August 2022 and 9<sup>th</sup> October 2022, with a high count of 42 on 1<sup>st</sup> October 2022 on a high tide roost in the saltmarsh from the Boardwalk in Holes Bay NE.

#### Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-	-	-	-	-	-	-	3	15	42	-	-
-	_	_	_	-	-	-	(18/8)	(29/9)	(1/10)	-	-

## Whimbrel (Numenius phaeopus)

A regular spring and autumn passage migrant seen in Holes Bay singly or in small numbers. Seems to favour the "Boat Graveyard" South of Cobb's Quay in Hole Bay SW.



© Martin Adams

One record on 16<sup>th</sup> January 2022, from an unknown source. It is possible given the time of year that this was a misidentified Curlew.

18 spring records between 19<sup>th</sup> April 2022 and 2<sup>nd</sup> June 2022, with a high count of 7 on 30<sup>th</sup> April 2022. 13 Autumn records between 12<sup>th</sup> July 2022 and 11<sup>th</sup> September 2022 with a maximum of 2 birds on several occasions.

Monthly maximum counts:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	-	-	1	4	1	2	2	1			
(	(16/1)	-	1	(30/4)	(4/5)	(2/6)	m	m	(11/9)			

# Curlew (Numenius arquata)

Can be seen in Holes Bay in all months of the year with counts of 50 or more in the winter, favouring Pergins Island and the saltmarsh South of the railway embankment. Can also be seen feeding in the fields of Upton Park Farm.



© Pete Corbin

Recorded in all months of the year; monthly maxima given below. 6 records of birds in 13 Acre Field, with a maximum of 28 on 20<sup>th</sup> December 2022.

Monthly maximum counts:

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Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
116*	c50	62	35	3	10	90	50	69	55	60*	85*
(16/1)	(5/2)	(12/3)	(8/4)	М	(20/6)	(24/7)	(9/8)	(22/9)	(18/10)	(6/11)	(4/12)

Combined Holes Bay count by WeBS counters shown by \* M = multiple dates

## Bar-tailed Godwit (Limosa lapponica)

Occasional winter visitor to Holes Bay. In Poole Harbour this species is more characteristic of Whitley Lake and Brownsea Island, and vastly outnumbered by the Black-tailed Godwit.



© Martin Adams

Recorded in Holes Bay North on 10 dates between 17<sup>th</sup> September 2022 and 19<sup>th</sup> October 2022 with a maximum of 3 birds. An increase in the 3 records of single birds in 2021.

# Black-tailed Godwit (Limosa limosa)

Can be seen in all months of the year in Holes Bay but numbers much greater on passage and in winter with regular counts of over 1,000, an internationally important figure, representing over 1% of the world's population. Can also be seen feeding in the fields of Upton Park Farm. The Poole Harbour wintering population is thought to be exclusively of the Icelandic race (Limosa limosa icelandica) the population of which is estimated at 50-70,000 individuals.



© Mark Wright

Unlike last year, Blackwit numbers did not reach treble figures in the second winter period. The August figure was just for Holes Bay NW and the December figure just Holes Bay North however, so numbers almost certainly were over 1000 across The Bay. However, the September and October figures were significantly down, for example 1348 in September 2021 vs. 710 in September 2022. There seemed to be plenty of juveniles present however, and the mild autumn is a possible explanation, with birds possibly staying North for longer.

However, it is also possible that last year was an aberration, with 2020 numbers peaking in August and September as passage birds pass through then increasing in January and February 2021 as

they return. The figures for the Poole Harbour population in 2020 support this pattern. It is worth noting therefore that although the maximum at one time is over 1500 birds, different birds use The Bay at different times of the year. Therefore, the true numbers of birds that use Holes Bay throughout the year are likely to be much higher than these already internationally important figures.

Recorded twice in Upton Park Farm and twice in 13 Arce Field.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1098*	750+	959	1504	69	34	177	969	710	782	648	968
(16/1)	m	(4/3)	(2/4)	(3/5)	(28/6)	(28/7)	(28/8)	(24/9)	(6/10)	(25/11)	(24/11)

Combined Holes Bay counts by WeBS counters shown by \*

m = multiple dates



**Turnstone** (Arenaria interpres)

A usually scarce visitor to Holes Bay as this species typically prefers stony or rocky areas to feed.



© Martin Adams

22 records, representing a big increase on 1 record in 2020 and 10 in 2021. 18 records in the 1<sup>st</sup> Winter Period up until 22<sup>nd</sup> April 2022, with a high count of 14 on 25<sup>th</sup> March 2022. 4 records in the 2<sup>nd</sup> Winter Period from 8<sup>th</sup> November 2022, with a high count again of 14. This increase in records is down to a greater focus on the South of The Bay, and especially on the rocky Railway Embankment, which is where most records refer to.

# **Knot** (Calidris canutus)

An occasional winter visitor to Holes Bay, probably appearing more regularly in recent years.



© Martin Adams

A flock had overwintered in 2020/21, an unusual occurrence for a bird usually seen only occasionally in small numbers. A small flock was frequently present this autumn, from 22<sup>nd</sup> August 2022, with the occasional single bird the rest of the year, an individual in breeding plumage in July 2022 of particular note.

#### Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-	-	1	-	-	-	1	1	25	20	13	-
_	_	(4/3)	_	-	-	m	m	(24/9)	(7/10)	М	-

m = multiple dates

# Ruff (Calidris pugnax)

Occasionally seen in Holes Bay or on the fields of Upton Park Farm, but not recorded every year.

Not recorded in 2022

# **Curlew Sandpiper** (Calidris ferruginea)

A scarce passage migrant in Holes Bay – recorded occasionally, and not necessarily every year.



**©Nick Woods** 

2 birds recorded on 10<sup>th</sup> October 2022 and 4 on 20<sup>th</sup> October 2022 after no records last year. Probably under-recorded amongst the, sometimes distant flocks of similar-looking Dunlin.

# Dunlin (Calidris alpina)

The smallest wader commonly found in Holes Bay, winter flocks may number 500 or more and when disturbed will form tight flocks.



© Martin Adams

An extraordinary high count of 1168 by the WeBS counters in January 2022 beat the 2021 high count, also from January, of 754. This was an outlier compared to other counts for the first winter period. As with other small waders, an extraordinary autumn with, for example, October's high count of 488 contrasting with a high count of 38 in October 2021! With the mild autumn, it is possible that birds on passage were delaying their journey further South.

It is worth noting that despite seeing such large numbers these birds are on the Red List due to the decline in wintering numbers. Last date 21<sup>st</sup> March 2022, first date 28<sup>th</sup> July 2022 – the latter 2 weeks earlier than in 2021.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1168*	100+	78	-	-	-	1	14	197	488*	300+	617
(16/1)	m	(2/3)	-	-	-	(28/7)	(29/7)	(29/9)	(9/10)	(25/11)	(1/12)

Combined Holes Bay counts by WeBS counters shown by \* m = multiple dates

# Woodcock (Scolopax rusticola)

Rarely recorded and then usually single birds flushed from some of the less disturbed woodland areas in winter.

Recorded as Peregrine prey in December 2022, most likely from a bird taken while flying over Poole at night.

# Jack Snipe (Lymnocryptes minimus)

A scarce winter visitor, seen infrequently in Holes Bay – probably associated with colds spells and not recorded each year.

Not recorded in 2022

# **Snipe** (Gallinago gallinago)

An inconspicuous wader often lurking on the edges of the reed beds in Holes Bay with only one or a few birds usually seen in winter. Birds may be heard calling as they fly out of the saltmarsh at dusk.



© Martin Adams

26 records in 2022 represented a big increase on the 10 Records in 2021. As with Turnstone, this is mainly a result of greater focus on the South of the Bay and suitable habitat there, in this case the Saltmarsh North of Cobb's Quay in the south west. Last date 3<sup>rd</sup> March 2022, first date 20<sup>th</sup> September 2022.

## **Common Sandpiper** (Actitis hypoleucos)

Mainly a spring or autumn migrant in Poole Harbour (and more rarely a winter visitor); usually seen around the edge of Holes Bay, sometimes frequenting the railway embankment or the shore along the Holes Bay cycleway.



© Sue Ketteridge

A single bird again overwintered in 2021/2022 and was overwintering in the second winter period of 2022. Although common as a passage bird locally only about 50 birds overwinter in the UK. Seen in every month except May 2022, with numbers peaking with 4 on 18<sup>th</sup> July 2022 and records peaking with 13 in August 2022. Last record on 16<sup>th</sup> December 2022.

## Bird Days:

	~, <del>~</del> .										
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8	5	3	6	-	1	8	13	9	3	3	3

# **Green Sandpiper** (Tringa ochropus)

A scare passage migrant or winter visitor, usually of single birds. Sometimes frequents the channels in Holes Bay NE.

One record on 9<sup>th</sup> October 2022 and one probable on 9<sup>th</sup> December 2022, the latter flying from near the boardwalk in Holes Bay NW.

# Redshank (Tringa totanus)

Present in Holes Bay for most of the year, and may have bred in the past, it's piping call is one of the signature sounds of wetland habitats. Passage or wintering flocks can number more than 200.



© Mark Wright

Recorded in all months of the year except June. Fairly consistent with last year's figures, although the high count of 323 exceeded last year's 283.

A colour-ringed Redshank was seen in Holes Bay NW on 2<sup>nd</sup> September 2022, an adult female ringed as a breeding adult in the Avon Valley in May 2022 as part of the 'WadersForReal' program: <a href="https://www.gwct.org.uk/wadersforreal/">https://www.gwct.org.uk/wadersforreal/</a>. She was seen on the breeding grounds with a chick in May and June 2022.

#### Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
245*	231	144*	42	1	-	142	148	217*	287*	323*	273*
(16/1)	(3/2)	(27/3)	(8/4)	(19/5)	-	(10/7)	23/8	(11/9)	(9/10)	(6/11)	(4/12)

Combined Holes Bay counts by WeBS counters shown by \*

# **Spotted Redshank** (Tringa erythropus)

Once a regular winter visitor or passage migrant with one or two birds being regularly seen along the edge of Holes Bay, this species has become much less frequent in recent years.



© Martin Adams

24 records in 2022 was a significant increase on the 8 records in 2021 and 2 records in 2020. 4 records in the first winter period up until 27<sup>th</sup> February 2022 and 20 records in the autumn/second winter period from 20<sup>th</sup> August 2022, peaking with 11 records in November 2022. This is again, at least in part, due to greater focus on the South West where most records occurred, primarily in the area just South of the Railway Embankment in the SW.

# **Greenshank** (Tringa nebularia)

An uncommon but annual passage migrant or winter visitor to Holes Bay, most records of one or two birds.



© Martin Adams

16 records in 2022, an increase on the 10 records in 2021. No records in the first winter period. 1 individual on the 28<sup>th</sup> and 29<sup>th</sup> July 2022, then the remaining 14 records were between 12<sup>th</sup> September 2022 and 13<sup>th</sup> October 2022, including 4 records of 2 birds.

As with Spotted Redshank, this is a bird that has become less common in recent years.

# Kittiwake (Rissa tridactyla)

A rare visitor to Holes Bay, though breed in small numbers it is common on passage along the Dorset Coast.



© Andy Collyer

A poorly looking adult Kittiwake was sat on rocks in Holes Bay near the PC World Drain on the 22<sup>nd</sup> November 2022, it was not reported again.

# Black-headed Gull (Chroicocephalus ridibundus)

Present all year in Holes Bay, flying over and on the fields of Upton Country Park. Breeds elsewhere in Poole Harbour and the strikingly patterned juveniles may attract attention in late summer. Large flocks may be seen flying to and from Holes Bay.



© Rene Goad

Seen in all months of the year with considerable numbers recorded in the winter months. Also, notable count of 750 leaving the roost from Holes Bay N/E heading north east. On the 19<sup>th</sup> February 2022 a huge count of 1285 with most coming into roost at dusk, watched from the quay by Asda in the S/E sector of Holes Bay. In June and July 2022 in the late evening up to 12 birds flying around Lambs Leas field feeding. Juveniles were first noted being present on the 6<sup>th</sup> July 2022.

#### Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1500>	1285	500>	38	22	14	c200	c150	576*	1462*	600>	780*
21st	19th	8th	4th	19th	1st	18th	29th	11th	9th	25th	4th

Combined Holes Bay counts by WeBS counters shown by \*

Mediterranean Gull (Ichthyaetus melanocephalus)

The distinctive calls of overflying birds of this species are a feature of early spring and birds may also be seen in Holes Bay or on the fields of Upton Park Farm.



© Nick Woods

Recorded in most months with most being recorded during March, the highest count of 23 flying over in small groups between 16:45 and 17:45 and believed to be roosting in Holes Bay and the total may be many more.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1>	2>	23>	5>	1>	2	4	2			1*	1*
17th	19th	23rd	4th	1st	6th/28th	18th	7th			9th	4th

Combined Holes Bay counts by WeBS counters shown by \*

# **Common Gull** (Larus canus)

Small numbers recorded in spring, winter, and autumn, usually in Holes Bay but probably under-recorded.



© Martin Adams

Good numbers seen during the first three months of the year and lingering into April 2022 and one record of a single on 8<sup>th</sup> May 2022. Birds returning in August 2022 in small numbers through to the end of the year.

#### Monthly maximum counts:

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	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	13*	24	12	3	1			3*	6*	2*	6*	5*
	16th	17th	9th	13th	8th			28th	11th	9th	6th	4th

Combined Holes Bay counts by WeBS counters shown by \*

# **Great Black-backed Gull** (Larus marinus)

# This large and intimidating gull is usually present in low numbers in Holes Bay.

Present all year in small numbers, with an unusually high count of 10 on the WeBS count on the 27<sup>th</sup> March 2022.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7*	3*	10*	5	4	4	3	4	8*	4*	5	6*
16th	27th	27th	19th	5th	20th	20th	7th	11th	9th	8th	12th

Combined Holes Bay counts by WeBS counters shown by \*



© Martin Adams

Present all year in small numbers, with an unusually high count of 10 on the WeBS count on the 27<sup>th</sup> March 2022.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7*	3*	10*	5	4	4	3	4	8*	4*	5	6*
16th	27th	27th	19th	5th	20th	20th	7th	11th	9th	8th	12th

Combined Holes Bay counts by WeBS counters shown by \*

# Herring Gull (Larus argentatus)

# Common resident and winter visitor.



© Martin Adams

Almost always present in Holes Bay. Usually breeds on buildings in Poole town and on industrial buildings to the west of Upton Country Park, but on a visit to the area on 4<sup>th</sup> July 2022 no juveniles were recorded.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
303*	199	268	17	10	7	35	270	262*	408*	200>	265*
16th	19th	2nd	19th	19th	1st	5th	28th	11th	9th	25th	4th

Combined Holes Bay counts by WeBS counters shown by \*



© Martin Adams

Yellow-legged Gull (Larus michahellis)

Once a regular visitor to Holes Bay in small numbers, this species is now only seen occasionally.



© Martin Adams

Four records for Holes Bay: only recorded in the latter half of the year with the first in August 2022 with a single on the 5th and two on the 31st. Singles reported on 19<sup>th</sup> and 29<sup>th</sup> September 2022,

and 8<sup>th</sup> October 2022. No reports for November but single bird seen on 23<sup>rd</sup> and 29<sup>th</sup> December 2022.

# **Lesser Black-backed Gull** (Larus fuscus)

# Regularly present in small numbers in Holes Bay.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3	3	9*	9	6	20>	7	6	12	8	4*	3*
16th	25th	27th	22nd	4th	12th	24th	7th	5th	30th	6th	4th

Combined Holes Bay counts by WeBS counters shown by \*



© Martin Adams

Recorded in every month often seen loafing on the lampposts at Holes Bay roundabout.

On 24<sup>th</sup> April 2022 a pair were seen copulating and, on the 28<sup>th</sup> April 2022, one was watched gathering nest material in Holes Bay S/E and flying to Asda. On 4<sup>th</sup> July 2022 four were seen on the roof of an industrial unit on the Factory Road Industrial Estate, two adults and nearby two young of different size and age suggesting at least two pairs bred.

## Sandwich Tern (Thalasseus sandvicensis)

# Breeding locally on Brownsea Island and an occasional visitor to Holes Bay particularly during passage time.

Recorded first in Holes Bay South with two on 29<sup>th</sup> March 2022 and singles on 10<sup>th</sup> and 12<sup>th</sup> April 2022, 19<sup>th</sup> May 2022, 1<sup>st</sup>, 22<sup>nd</sup>, 28<sup>th</sup> June 2022, 7<sup>th</sup> August 2022, 19<sup>th</sup> September 2022.

A high count of five birds on 5<sup>th</sup> October 2022 were seen in Holes Bay S/E in blustery conditions. In November 2022 in Holes Bay S/W a single was seen on the 8<sup>th</sup>, two on the 10<sup>th</sup> with a 1<sup>st</sup> year and an adult bird seen separately. Also recorded as Peregrine prey items at Barclays House.



**©Andy Collyer** 

Recorded first in Holes Bay South with two on 29<sup>th</sup> March 2022 and singles on 10<sup>th</sup> and 12<sup>th</sup> April 2022, 19<sup>th</sup> May 2022, 1<sup>st</sup>, 22<sup>nd</sup>, 28<sup>th</sup> June 2022, 7<sup>th</sup> August 2022, 19<sup>th</sup> September 2022.

A high count of five birds on 5<sup>th</sup> October 2022 were seen in Holes Bay S/E in blustery conditions. In November 2022 in Holes Bay S/W a single was seen on the 8<sup>th</sup>, two on the 10<sup>th</sup> with a 1<sup>st</sup> year and an adult bird seen separately. Also recorded as Peregrine prey items at Barclays House.

# **Great Northern Diver** (Gavia immer)

A very scarce winter visitor to Holes Bay, not recorded in every year and then usually single birds.

Not recorded in 2022.

**Shag** (Phalacrocorax aristotelis)

Breeding along the cliffs of Dorset, this species, unlike the Cormorant, is rarely seen in the inner parts of Poole Harbour.



© Martin Adams

A single bird on 22<sup>nd</sup> February 2022 and 3 on 13<sup>th</sup> April 2022; both records from the south part of Holes Bay. Also, a single bird Holes Bay SE on 25<sup>th</sup> November 2022.

**Cormorant** (Phalacrocorax carbo)

Often present in small numbers in Holes Bay, much larger flocks are occasionally recorded.



© Pete Corbin

Present in Holes Bay throughout the year, usually with 20 or less birds being recorded but with the following large counts (50 or more birds): 58 on 15<sup>th</sup> February 2022, 54 on 24<sup>th</sup> and 150 on 29<sup>th</sup> October 2022, c100 on 13<sup>th</sup> and 50+ on 26<sup>th</sup> November 2022. A bird on 18<sup>th</sup> July was seen to kill and eat a large Eel.

Spoonbill (Platalea leucorodia)

An occasional visitor to Holes Bay though now regularly seen in some numbers in Poole Harbour as a whole.



© Rene Goad

Single birds in Holes Bay on 28<sup>th</sup> July 2022 and 5th December 2022 with 6 on 11<sup>th</sup> December 2022.

Cattle Egret (Bubulcus ibis)

Once a rare passage migrant, the Cattle Egret is now regularly recorded at sites across Dorset and has bred in the county.

Not recorded in 2022.

# Grey Heron (Ardea cinerea)

Usually present in Holes Bay, with birds sometimes seen roosting at high tide along the railway line; sometimes visits Grove Pond in Upton Country Park.



© Rene Goad

Recorded (usually in single figures) in all months of the year in Holes Bay with maximum counts of 12 on 9<sup>th</sup> October 2022 and 8<sup>th</sup> November 2022. Birds were seen roosting on the railway embankment at high tides on several occasions. An immature bird was reported on 15<sup>th</sup> June 2022.

# **Great White Egret** (Ardea alba)

Rarely recorded in Holes Bay, though with increasing numbers being reported in Dorset (as a passage migrant and winter visitor) perhaps likely to become more frequent.

Single birds in Holes Bay on 22<sup>nd</sup> August 2022 and 4<sup>th</sup> December 2022.

# **Little Egret** (Egretta garzetta)

Usually present in Holes Bay, sometimes with large high tide roosts along the railway line or in the trees along the shore of Upton Country Park.



© Pete Corbin

Usually present around Holes Bay with small numbers of birds sometimes feeding in the fields of Upton Park Farm. Monthly maxima are given below, though these may not be truly representative

of the numbers present, since largest counts are often of birds flying to or from roosts; daytime visits may not therefore record the maximum number present. A regular roost is believed to occur on Pergins Island with birds sometimes seeming to assemble nearby on the saltmarsh. The monthly maxima for June, July and August all referred to roosts or pre-roost gatherings on or near Pergins Island.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
17	6	18*	4	4	28	c100	71	27*	36*	15*	14*
(30th)	(3rd)	(27th)	(19th)	(5th)	(28th)	(13th)	(11th)	(11th)	(9th)	(6th)	(4th)

Combined Holes Bay counts by WeBS counters shown by \*

# **Osprey** (Pandion haliaetus)

Regularly seen in Holes Bay on migration, with sightings having increased in recent years. In the autumn, one or more birds may be present for several weeks. A platform on the Upton Country Park side of Pergins Island was erected in 2020. A project to reintroduce the Osprey to Poole Harbour is currently being run by the Birds of Poole Harbour.



© Rene Goad

There had only been 3 records in 2021 after 2 very productive autumns in 2019 and 2020. There were no Spring records in 2022, but once again a productive autumn with birds recorded on 17 dates between 30<sup>th</sup> August and 27<sup>th</sup> September 2022, with 2 birds recorded on 3 occasions. Birds were frequently recorded fishing around Holes Bay, more frequently in the (more watched) North. They were also seen eating their catch and roosting on Pergins Island, often on the feeding platform installed by Birds of Poole Harbour in the NW, but also on dead trees in the NE.

There was one record of a Scottish ringed juvenile and all records that stated plumage referred to Juveniles. Juveniles migrate later in the summer than the adults, and passage birds from further North take longer to get to the South coast, so it is probable that these records were all of Scottish juveniles.



© Mark Wright

Sparrowhawk (Accipiter nisus)

Regularly seen flying over Upton Country Park and around Holes Bay- probably breeds locally.



© Martin Adams

28 records of this, often elusive species, with records from every month of the year. Recorded throughout Upton CP, around Holes Bay and on Pergins Island with 1 record at Barclays House. One record of 2 birds. No definite records of breeding, but an individual seen bathing on 12<sup>th</sup> May 2022 had what appeared to be nesting material in its mouth.

Marsh Harrier (Circus aeruginosus)

Occasional visitor to Holes Bay, birds flying over the saltmarsh or reed beds and usually causing havoc amongst the waders and wildfowl.



© Andy Collyer

3 autumn records in Holes Bay North in 2022 after no records in 2021. Recorded on 13<sup>th</sup> September, 17<sup>th</sup> November & 22<sup>nd</sup> November 2022. Wintering numbers across Poole Harbour were particularly high during this period.

Hen Harrier (Circus cyaneus)

Very rarely recorded in Holes Bay, though at least one previous record: one near Upton Country Park in 1983.

One record in Holes Bay NE on 12th November 2022 after no records in 2021.

Red Kite (Milvus milvus)

Increasing numbers seen in south-east Dorset, especially in spring of 2020, several records for Holes Bay, Upton Country Park and nearby areas.

6 records in 2022, a slight increase on the 4 records in 2021. 5 spring records between March and May 2022 and 1 record in October 2022.

# Buzzard (Buteo buteo)

The most frequently seen bird of prey in the recording area, and has bred in Upton Country Park, once scarce it spread rapidly in south-east Dorset in the 1980s and 1990s.



© Rene Goad

Ever present – recorded in every month of the year around Upton CP, Holes Bay, Upton Park Farm and the PC World Drain. Almost certainly bred: one seen acting aggressively towards gulls on Pergins Island 8<sup>th</sup> April 2022, where a pair were seen copulating last year. Juveniles seen from the end of summer, and one record of 5 birds together 15<sup>th</sup> September 2022. Recorded on a few occasions hovering in Holes Bay North East and South East in the brisk winds.

## Tawny Owl (Strix aluco)

# Heard from woodland areas notably in Upton Country Park.

Few records, but birds recorded from Upton Country Park in February-November. Both males and females were heard, and birds were heard calling from the direction of The Grove, Llewellin Wood and the Blandford Road. A juvenile was reported calling on 5<sup>th</sup> July 2022. These records suggest at least one pair bred at the Park.

## Kingfisher (Alcedo atthis)

A winter visitor to Holes Bay (when at least one bird is often present), with movement through in autumn, the birds starting to appear in August. Often seen perched on posts (or a shopping trolley) close to the Holes Bay cycleway and occasionally visits ponds in Upton Country Park.



© Martin Adams

Recorded on 99 dates from 1st January to 25<sup>th</sup> March 2022 and from 1<sup>st</sup> July 2022 to 27<sup>th</sup> December 2022 mainly from the edges of Holes Bay and PC World Drain: usually a single bird but occasionally 2 or 3 birds. Single records for Dead Man's Ditch and the Grove Pond. The number of bird days (see below) suggests passage through the site in autumn with fewer birds remaining in winter.

Monthly bird-days:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
9	9	11				2	8	25	19	20	13

# **Great Spotted Woodpecker** (Dendrocopos major)

Widespread and conspicuous in woodland areas and gardens, breeding at Upton Country Park and probably other areas.

Regularly recorded in all months of the year, usually at Upton Country Park with at least one drumming bird and another visiting a probable nest site. Two fledged young were seen being fed along the front drive to Upton House on 1<sup>st</sup> June 2022; at least one pair breeding in the Park. At least one record from Holes Bay south of the railway line.

# **Green Woodpecker** (Picus viridis)

The distinctive 'yaffle' call of this species is frequently heard in Upton Country Park (often from the fields behind the stone bench) and the bird probably breeds in the Park and possibly in other areas.



© Rene Goad

Recorded in all months of the year (except May), usually at Upton Country Park, often from near the duck pond/east field or in the vicinity of Upton House, and sometimes from the SANG near Roper's Lane. Territorial behaviour was noted on the front field and near Bascombe's pond in the Park and a juvenile was seen on 23<sup>rd</sup> August 2022, suggesting at least one pair bred in Upton Country Park.

# Kestrel (Falco tinnunculus)

Seen occasionally overflying Upton Country Park and more frequently along the Holes Bay Road.



© Rene Goad

18 records in 2022 was a slight increase on 13 records in 2021, but the biggest change was in location: There were no records from Upton CP in 2021, but 11 in 2022. This is possibly due to changes in the management of the park: less mowing could potentially have increased the population of the rodents that are Kestrel's main prey item. An individual was once again recorded roosting on a residential block in Holes Bay South, and on at least one occasion eating prey on a lamppost in Holes Bay South East.

## Peregrine (Falco peregrinus)

After several years of records in Holes Bay South on the Asda building, a pair successfully bred on Barclay's House in 2021 after a failed attempt in 2020.



© Peter Twamley

Once again, the resident Peregrines bred and produced 3 young. Sadly, once again one of the young died after hitting a window shortly after fledging. Fortunately, the other 2 seemed to thrive until the time when they would have naturally dispersed.



© Peter Twamley

Breeding occurred earlier than in 2021. The first observed breeding evidence was a nest changeover observed on the 25<sup>th</sup> March 2022, significantly earlier than the confirmation that the first eggs had been laid on 14<sup>th</sup> April 2021. The adults were seen feeding the (out of sight) chicks on 26<sup>th</sup> April 2022, whereas it had been confirmed that all 3 of 2021's clutch had hatched on 14<sup>th</sup> May 2021. Finally, the first chick seen on the balcony on 22<sup>nd</sup> May 2022, and the first observed fledging on 5th June 2022, both 11 days earlier than in 2021. As these latter events are the most conspicuous and easily observed, and as the birds were well observed in this period, 11 days is probably the true figure.





© Karen Cuglietta

© Peter Twamley

One of the fledglings was reported to have been stunned when hitting a car window in the car park opposite Barclays House on the same day, and it was on 6<sup>th</sup> of June 2022 that the juvenile died - the first day that all 3 had been observed flying. The death of the 2021 juvenile had occurred 5 days after the first bird fledged, demonstrating how dangerous these first few days are. On the 7<sup>th</sup> June 2022, another of the juveniles had to be rescued after becoming stuck behind a glass balcony.

The remaining juveniles were seen flying well after this however and observed "play fighting" in mid-air on 2 occasions.



© Rene Goad



© Karyn Cuglietta

On 14<sup>th</sup> of July 2022 another Peregrine was reported to have died after hitting a window. However, it soon became apparent that the resident adults and both juveniles were still alive. As it was too early in the year for a juvenile from another site, the dead bird must have either been a satellite bird; a non-breeding adult waiting for a vacancy at a nest site; or possibly one of the previous year's juveniles returning. On the 26<sup>th</sup> of May 2022, 3 Peregrines had been seen flying together from Barclays until one, which turned out to be the resident male, turned back. It is likely that this was one of the previous year's juveniles, as the adults would not tolerate an adult intruder on their patch. Non-breeding sub-adult Peregrines returning to the nest site in the years after they fledged is a well observed behaviour, with some in urban areas even staying on to 'help out' with the next brood.



© Rene Goad

On the 23<sup>rd</sup> of June 2022, a juvenile and adult were seen on a crane on Poole Quay, and on 26<sup>th</sup> June 2022 a food pass was observed between an adult and a juvenile back at the nest site. On 1<sup>st</sup> July 2022, a juvenile was seen on its own at the Power Station site in Holes Bay SW, before being chased away by a Raven. The 25<sup>th</sup> of July 2022 brought the last sighting of a juvenile at the nest site. There were other local sightings of juveniles, including one in Holes Bay NW on 31<sup>st</sup> July 2022 but of course by this time juveniles from other breeding sites are also dispersing. The adults remained on territory throughout the year, frequently seen on Barclays, usually individually, with the female spotted more frequently.



© Peter Twamley



© Mark Wright

There were 8 records in Holes Bay, including 3 in Holes Bay SW. On 2 occasions here they were in conflict with Ravens. On several occasions they were seen in conflict with Gulls at the nest site.

This year Barclays Bank decided to relocate all the remaining staff in Barclay's House and put the building up for sale. At the time of writing, the future of the building remains uncertain, with demolition a real possibility. It is hoped that the nest box could be relocated to the Harbour Sails Tower block (aka the Asda building) in this eventuality. The cladding work that began on the Asda Building in late 2021 continued throughout the year. This meant that the Peregrines used this site far less often, and its function as a larder and food preparation area was replaced by an area of the roof of the Barclays Building just around the corner from the nest ledge.



© Peter Twamley

As the Asda building was the best place for recovering prey remains, our records were not nearly as comprehensive as in 2021. In the Spring there seemed to be a definite tendency for the birds to head in the direction of Brownsea lagoon and return with prey items characteristic of this site, such as Bar-tailed Godwit and Terns. Bar-tailed Godwit was the only new addition to the list of prey items recorded over the last few years, which now stands at 24 Species.

A full account of last year's breeding, the history of the pair and a brief introduction to the Peregrine Falcon can be found in the 2021 Holes Bay Report.



© Peter Twamley

Jay (Garrulus glandarius)

A common breeding bird in Dorset with additional birds often arriving in autumn and conspicuous in the woodland and parkland of Upton Country Park.



© Martin Adams

Recorded in small numbers in all months of the year maximum count of 10 on 24th October 2022 at Upton Country Park (total for all parts of the Park). Nest building was recorded in SE Holes Bay on 13th April 2022 but there were no records of confirmed breeding.

# Magpie (Pica pica)

# A common bird, probably breeding around the recording area.

Widely recorded all months of the year, maximum count 10 at Upton Country Park on 7th November 2022 (total for all parts of the Park). No records of breeding but it is likely that birds bred in several locations.

## Jackdaw (Coloeus monedula)

Often the most abundant member of the crow family, with flocks frequenting the fields of Upton Park Farm – probably breeds in trees and buildings in the recording area. Large roosts sometimes form on Pergins Island.



© Rene Goad

Recorded in all months of the year and usually present in and around Upton Country Park, often in large numbers. Counts of 100 or more were made on the following dates: 200+ on 25<sup>th</sup> January 2022, c100 on 17<sup>th</sup> February 2022, c100 on 6<sup>th</sup> June 2022, 200+ on 13<sup>th</sup>, c150 on 20<sup>th</sup> and c200 on

28<sup>th</sup> July 2022, 100+ on 9<sup>th</sup> and c450 on 19<sup>th</sup> August 2022, 500+ on 11<sup>th</sup> and c500 on 24<sup>th</sup> October 2022, 176 on 7<sup>th</sup> and 1000+ on 10<sup>th</sup> November 2022, 1000+ on 9<sup>th</sup>, 1500+ on 16<sup>th</sup> and 800+ on 29<sup>th</sup> December 2022. Most of the large counts referred to birds flying to roost on Pergins Island. No breeding records received but almost certainly bred in the area.

# Rook (Corvus frugilegus)

Recorded much less often than the Jackdaw, with which it will feed, thought to have previously bred on the Upton Estate.



© Martin Adams

Possibly under-recorded, recorded on 15 dates (a similar number to 2021, which was an increase on 2020). Small numbers were recorded in July-September with a maximum of 6 on 7<sup>th</sup> February 2022. Birds were seen nest building in a large Redwood tree near Upton House in spring but there were no records of successful breeding. Most records were from Upton Country Park.

## Carrion Crow (Corvus corone)

A resident species probably breeding in the recording area.



© Sue Ketteridge

Usually present in Upton Country Park, with birds recorded from the recording area in all months. High counts (30 or more) included: 50+ on 25<sup>th</sup> January 2022 (Upton Country Park), 63 on 6<sup>th</sup> March 2022 (on land now built on, immediately south of the railway and east of Holes Bay Road), 56 on 8<sup>th</sup> May 2022 (Holes Bay SE), 76 on 20<sup>th</sup> June 2022 (Holes Bay), 45 on 7<sup>th</sup> August 2022

(Holes Bay), and 30 on 28<sup>th</sup> November 2022 (Pergins Island). At least one pair bred at Upton Country Park with a youngster begging for food seen there on 8<sup>th</sup> June 2022.

Raven (Corvus corax)

In recent years the Raven has been recorded regularly in the area and is believed to have bred on Pergins Island, reflecting the bird's increasing presence in Dorset. Its distinctive call is often heard over Upton Country Park.



© Martin Adams

Recorded only in January and July-December, suggesting birds may have been absent from the area in the breeding season. All records of one or two birds, often of birds flying over Upton Country Park, Holes Bay or nearby areas such as the power station site or the ASDA car park.

Coal Tit (Periparus ater)

Frequent in woods and gardens and probably breeding widely in the recording area.

Recorded in all months of the year (except April-May). Maximum recorded count was 3 at Upton Country Park on several dates. No reports of breeding were received but it is likely the bird bred at Upton Country Park and possibly elsewhere.

Marsh Tit (Poecile palustris)

An uncommon and declining breeding resident in Dorset, very rarely reported from the recording area.

One in the Grove at Upton Country Park on 16th January 2022.

Blue Tit (Cyanistes caeruleus)

Widespread and common as a breeding bird.



© Rene Goad

Recorded in all months of the year. Maximum count was 22 on 5<sup>th</sup> December 2022 (combined count for all areas of Upton Country Park). At least two pairs bred at Upton Country Park with birds visiting a nest hole in an Oak along the shoreline on 18<sup>th</sup> March 2022 and 2 pairs with fledged young seen on 1<sup>st</sup> June 2022.

# Great Tit (Parus major)

Probably widespread and common as a breeding bird around the recording area.



© Sue Ketteridge

Recorded in all months of the year with a maximum count of 25 birds on 5<sup>th</sup> December 2022 (combined count for all areas of Upton Country Park). Bred in Upton Country Park (and possibly elsewhere in the recording area) with fledged young reported on 19<sup>th</sup> May 2022, 1<sup>st</sup> June 2022 and 5<sup>th</sup> July 2022.

## Sand Martin (Riparia riparia)

The scarcest of the three hirundines (Swallows and Martins) which are regular summer visitors, though a few are usually seen over Holes Bay on migration.

Only five records received – 2 heading west over Upton Country Park on 21<sup>st</sup> March 2022, 10 over Holes Bay NW on 21<sup>st</sup> July, 5+ in a flock with House Martins totalling at least 35 birds at Upton Country Park on 28<sup>th</sup> July 2022, 4 at Holes Bay NE on 31<sup>st</sup> July 2022 and 3 at Upton Country Park on 14<sup>th</sup> September 2022.

# Swallow (Hirundo rustica)

# A few pairs often breed on buildings at Upton Country Park with flocks seen feeding over Holes Bay and the fields of Upton Park Farm.

Regularly recorded from 19<sup>th</sup> April to 6<sup>th</sup> October 2022, usually in small numbers (20 or fewer birds) though the following larger counts were made in the autumn: 28 on 24<sup>th</sup> and 21 on 28<sup>th</sup> July 2022, 33 on 22<sup>nd</sup> and 30+ on 30<sup>th</sup> August 2022, 40 on 8<sup>th</sup>, 10<sup>th</sup> and 18<sup>th</sup> and 28 on 19<sup>th</sup> September 2022. Most records from Upton Country Park. A pair once again bred in one of the corner-'ice house/turrets' of the walled garden at Upton Country Park with 3 fledged young seen on 28<sup>th</sup> June 2022. One of the previous breeding sites (the car park toilets) was demolished and a new building (the Welcome Centre) was constructed on the site in 2022. It is not thought that birds bred in the courtyard of the tearooms, nor is it known if birds bred on Upton Park Farm.





© Rene Goad

© Martin Adams



© Sue Ketteridge

House Martin (Delichon urbicum)

Regular on migration with flocks often assembling in autumn, sometimes resting on prominent buildings such as Upton House.

Recorded on 17 dates from 7<sup>th</sup> June 2022 to 26<sup>th</sup> September 2022 (the first date being almost 6 weeks later than in 2021). However, there were 8 records of 10 or more birds (compared with only 2 in 2021): 26 on 28<sup>th</sup> June, 20 on 1<sup>st</sup>, 12 on 2nd, c20 on 27<sup>th</sup> and 30+ on 28<sup>th</sup> July, c30 on 22<sup>nd</sup>

August 2022, 20+ on 18<sup>th</sup> and 21 on 20<sup>th</sup> September 2022. Most of the records were at Upton Country Park, with birds often feeding over the SANG or farm fields.



© Sue Ketteridge

# Cetti's Warbler (Cettia cetti)

The sudden, indignant song of this inconspicuous resident warbler has been heard regularly along the shoreline since 2017 when a pair is first thought to have bred at Upton Country Park.

In the first part of the year only a single record – one bird at the PC World Drain on 28<sup>th</sup> January 2022, then a gap till October with single birds recorded as follows: Holes Bay on 8<sup>th</sup> and Upton Country Park on 24<sup>th</sup> October 2022, Upton Country Park on 14<sup>th</sup> November and PC World Drain on 21<sup>st</sup> December 2022. The pattern of records suggests that birds failed to breed in the recording area, possibly for the first time since 2017, but were present again from the autumn onwards. It is thought that all the records were from the 'traditional areas' (the boardwalk at Upton Country Park and the PC World Drain) with the area previously occupied at the north end of the Grove Pond in 2021 apparently vacant.

# Long-tailed Tit (Aegithalos caudatus)

Probably a widespread breeding bird, the noisy flocks formed in the winter and roving around woodlands and gardens are more conspicuous.



© Martin Adams

Recorded in all months (usually 1-10 birds) with the largest count being of 15 birds at Upton Country Park on 17<sup>th</sup> November 2022. Probably bred at Upton Country Park (fledged young reported on 1<sup>st</sup> June 2022) and possibly elsewhere in the recording area.

#### Willow Warbler (Phylloscopus trochilus)

Once thought to be a regularly breeding bird at Upton Country Park, the Willow Warbler has declined as a breeding bird and is now usually seen on spring or autumn migration, although the attractive song can sometimes be heard in spring and occasionally in autumn.

Recorded in May-October and in December 2022, with an earlier record of a bird at Fleetsbridge (just outside of the recording area) on 3<sup>rd</sup> April 2022. A singing bird was present at the north end of the Grove Pond in Upton Country Park from at least the 26<sup>th</sup> May 2022 to 6<sup>th</sup> June 2022, suggesting a bird may have held territory there, at least temporarily. Presumed migrants were recorded in the autumn, mainly from Upton Country Park or the PC World Drain, usually just single birds but 4 were present at the PC World Drain on 18<sup>th</sup> August 2022, with a late bird in SE Holes Bay on 12<sup>th</sup> October 2022. Very unusually, a single bird was found at the PC World Drain on 5<sup>th</sup> and 8<sup>th</sup> December 2022.

### Chiffchaff (Phylloscopus collybita)

In recent years, far commoner than the similar Willow Warbler; difficult to see but the simple 'chiff-chaff' song can be heard from woodland and scrub. A common passage migrant and found as a winter visitor.

Recorded in all months of the year. Wintering records were mainly from the PC World Drain in the first winter period (maximum 6 on 24<sup>th</sup> January 2022), with a single record from Upton Country Park and from both areas in the second winter period (maximum 20 at the PC World Drain on 10<sup>th</sup> December 2022). Singing birds widely recorded especially at Upton Country Park and at the PC World Drain. At Upton Country Park 14 singing birds were recorded on 19<sup>th</sup> April 2022 and 6 on the 1<sup>st</sup> June 2022, allowing for some birds singing on passage, it suggests a number of pairs bred in the Park.

# Siberian Chiffchaff (Phylloscopus collybita tristis)

The Siberian Chiffchaff is usually regarded as a different subspecies to the bird commonly found in Britain; difficult to distinguish on plumage it has a distinctive call and is regarded as a scarce autumn migrant and increasing winter visitor in Dorset.



© Nick Woods

Single birds reported on 2 dates (9<sup>th</sup> and 19<sup>th</sup> January 2022) at the PC World Drain. This was far fewer than in 2021, when birds were reported on 12 dates, but this may reflect less intense coverage by observers.

Sedge Warbler (Acrocephalus schoenobaenus)

Usually reported as a migrant passing through, though sometimes singing in one place for a few days – much less frequent than the Reed Warbler.

Single birds on 4<sup>th</sup>, 18<sup>th</sup> and 22<sup>nd</sup> August and 24<sup>th</sup> September 2022, mostly from near the bird screen observation point in Upton Country Park.



© Nick Woods

Reed Warbler (Acrocephalus scirpaceus)

The song of this summer migrant is regularly heard from reed beds around the Bay and in wet habitats such as the Grove Pond and duck pond at Upton Country Park.

Regularly recorded in low numbers (maximum 10 on 7<sup>th</sup> May 2022) from 19<sup>th</sup> April 2022 to 18<sup>th</sup> September 2022. Singing birds were recorded at the following locations in Upton Country Park: Grove pond, the boardwalk, duck pond, stone bench and observation point and also at the power station site. Fledged young were reported at Upton Country Park on 15<sup>th</sup> July and 18<sup>th</sup> August 2022, and it is likely that several pairs bred.



© Nick Woods

# Blackcap (Sylvia atricapilla)

Mainly a summer migrant, with a few birds sometimes being found in winter, the clear, tuneful song is widely heard from woodland and scrub.







Blackcap female © Nick Woods

Regularly recorded from 28<sup>th</sup> March 2022 to 20<sup>th</sup> September 2022, with additional single birds at Holes Bay or Upton Country Park on 11<sup>th</sup> and 31<sup>st</sup> October 2022 and 17<sup>th</sup> November 2022, possibly representing wintering birds. Singing birds widespread in woodland and scrub areas especially at Upton Country Park and the PC World Drain (Fleets Channel). Maximum recorded was 17 birds around Upton Country Park on 15<sup>th</sup> April 2022, including around 12 singing males. Fledged young were seen in the Park on 1<sup>st</sup> August 2022.

# Garden Warbler (Sylvia borin)

Much scarcer than the similar sounding Blackcap, the Garden Warbler may occur occasionally on passage but tends not to breed in the recording area.

Single birds, thought to be migrants, recorded in the scrub along the Holes Bay cycleway on 18<sup>th</sup> July 2022 and at the PC World Drain on 18<sup>th</sup> August 2022.

#### Whitethroat (Sylvia communis)

Much more frequent than the Lesser Whitethroat on passage recorded most years, with birds sometimes singing and possibly breeding.

Relatively few records – singles on 18<sup>th</sup> August 2022 at the PC World Drain and on 22<sup>nd</sup> September 2022 at Holes Bay.

#### Firecrest (Regulus ignicapilla)

Previously a scarce winter visitor to areas such as Upton Country Park, the Fircrest has greatly increased as a breeding bird in recent years, with singing birds heard in a number of locations. Wintering birds are widely found in woodland and garden areas with good cover.

Small numbers (up to 2) recorded on 22 dates in January-May and September-December 2022 (monthly bird-days given below). At Upton Country Park singing birds were recorded on at least two occasions at each of the following locations: near Upton House, near the SANG car park and

in the area between the Grove pond and the path from Allens Lane, suggesting several males may have held territories, though the lack of subsequent records means that breeding was not confirmed. Bird-day figures suggest numbers increased towards the end of the year, with birds present both in Upton Country Park and at the PC World Drain.

Monthly bird-days:

-	<u> </u>	J -										
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1	2	4	5	1	-	-	-	1	4	2	7

#### Goldcrest (Regulus regulus)

A common breeding bird in woodland and gardens, still far outnumbering the Firecrest, which has recently increased as a breeding bird.

Recorded in all months mainly from Upton Country Park, but also the PC World Drain and Holes Bay in general, maximum count 7 at Upton Country Park on 7th February 2022 (count from all areas). Fledged young were recorded at Upton Country Park on 1st and 15th June 2022 confirming that breeding took place.

# Wren (Troglodytes troglodytes)

Widespread and common in woodland, scrub and gardens as a breeding bird, occupying even small areas of suitable habitat.



© Martin Adams

Recorded in all months of the year, with a maximum count of 24 birds from all areas of Upton Country Park on 1<sup>st</sup> June 2022. No confirmed records of breeding though probably nested in many parts of the recording area.

#### Nuthatch (Sitta europaea)

Widely distributed as a breeding bird in woodland and gardens, one of the noisiest and most conspicuous woodland birds.



©Pete Corbin

Recorded in most months of the year and widespread in woodland and gardens at Upton Country Park and possibly suitable habitat elsewhere around the Bay. Maximum count of 9 birds on 7<sup>th</sup> February 2022 and 5<sup>th</sup> December 2022; these counts from all areas of Upton Country Park. A bird seen taking food into nest in an Oak tree near the stone bench on 27<sup>th</sup> April 2022 and a pair were also seen taking nest material into a hole in a Silver Birch tree on 14<sup>th</sup> April 2022 (the two nest sites being c 200 m apart); at least one pair, and probably several, bred in the Park.

#### Treecreeper (Certhia familiaris)

Much quieter and far less conspicuous than the Nuthatch, the Treecreeper is widely distributed in woodland, usually seen creeping up the trunks of the larger trees.

Recorded on 20 dates in January-May and August-November 2022— usually as single birds: almost all records from Upton Country Park, from a wide variety of locations. Singing birds recorded from near Bascombe's pond (several occasions) and from near the Grove Pond. A recently fledged youngster seen begging food from parents near the duck pond on 19<sup>th</sup> May 2022, confirming that at least one pair bred.

#### Starling (Sturnus vulgaris)

Most obvious for the passage or winter flocks, often seen feeding on grassland or perched on pylons and electricity transmission lines, e.g., on the Hamworthy side of Holes Bay. Starlings may also breed in trees or buildings.



© Martin Adams

Recorded in all months of the year. Fledged young were reported from the power station site (4 on 10<sup>th</sup> May 2022) and SW Holes Bay (on 3<sup>rd</sup> June 2022) suggesting local breeding may have occurred. Counts of 50 or more: 52 on 16<sup>th</sup>, 102 on 18<sup>th</sup> and 300+ on 31<sup>st</sup> January 2022, 200+ on 4th, c100 on 19<sup>th</sup> February 2022, 50+ on 31<sup>st</sup> July 2022, 54 on 2<sup>nd</sup>, 200+ on 29<sup>th</sup> September 2022, c90 on 21<sup>st</sup> and 300+ on 23<sup>rd</sup> October 2022, 500+ on 10<sup>th</sup> and 50 on 27<sup>th</sup> November 2022. The 100 or so seen on 19<sup>th</sup> February 2022 were recorded as a 'mini murmuration' flying in a tight flock around the Holes Bay Road in the vicinity of Poole Station.

# Song Thrush (Turdus philomelos)

# A widespread breeding species with its repetitive song of clear phrases heard from gardens and woodland.

Regularly present in small numbers at Upton Country Park (maximum count 6 at Upton Country Park on 1<sup>st</sup> June 2022) and elsewhere in the recording area (recorded in all months of the year), including singing birds. A bird was seen carrying food near the duck pond in Upton Country Park on 1<sup>st</sup> April 2022 and an adult was seen feeding a youngster in a similar location on 25<sup>th</sup> April 2022, indicating breeding in that area (likely to have bred elsewhere too).







Mistle Thrush © Nick Woods

#### Mistle Thrush (Turdus viscivorus)

A widespread species, perhaps more comfortable away from cover than the Song Thrush it is often seen in the fields of Upton Park Farm.

Recorded in small numbers (1-4 birds), mainly from Upton Country Park in most months of the year including singing birds. Likely to have bred at the Park but no records to confirm this.

Recorded in small numbers (1-4 birds), mainly from Upton Country Park in most months of the year including singing birds. Likely to have bred at the Park but no records to confirm this.

# Redwing (Turdus iliacus)

Like the Fieldfare a winter visitor also seen on passage, often more abundant than the Fieldfare with birds present in woodland areas for much of winter and large flocks numbering several hundred in severe weather.

Recorded from 1<sup>st</sup> January 2022 to 30<sup>th</sup> March 2022 (maximum 62 at Upton Country Park on 4<sup>th</sup> March 2022) and from 20<sup>th</sup> October 2022 to the end of the year (maximum 10+ on at Upton

Country Park on 31<sup>st</sup> October 2022); frequently recorded from Upton Country Park during these periods.

# Blackbird (Turdus merula)

A common breeding bird and prominent singer, the Blackbird is also a migrant and winter visitor though these are difficult to distinguish from the residents, often seems more abundant in winter.



© Martin Adams

Recorded in all months of the year, mainly from Upton Country Park. Several pairs probably bred with nest building seen in Holes Bay SW (13<sup>th</sup> April 2022) and near Roper's Lane in Upton Country Park (19<sup>th</sup> April 2022), a bird carrying food or a faecal sac in Upton Country Park (1<sup>st</sup> July 2022) and recently fledged young in Upton Country Park (12<sup>th</sup> July 2022). Maximum count was 23 birds on 1<sup>st</sup> June 2022 from all areas of Upton Country Park.

### **Spotted Flycatcher** (Muscicapa striata)

A declining summer visitor in Dorset, the Spotted Flycatcher is now a characteristic autumn migrant often seen in scrub around the farm fields at Upton Country Park where individuals will make fly-catching sorties and usually return to the same perch.



© Rene Goad

Recorded on 11 dates from 29<sup>th</sup> August 2022 to 16<sup>th</sup> September 2022, usually 1-3 birds with a maximum of 'at least 4' at Upton Country Park on 14<sup>th</sup> September 2022; monthly bird-days given below. Birds were most frequently recorded around the east fields of Upton Country Park (the fields behind the stone bench) or at the PC World Drain.

Monthly bird-days:

	J -										
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-	-	-	-	-	-	-	9	16	-	-	-

#### Robin (Erithacus rubecula)

Widespread and common as a breeding bird and, where fed, happy to approach people; migrant birds probably increase numbers in winter.



© Nick Woods

Recorded in all months of the year with maximum counts of 22 birds from all areas of Upton Country Park on 20<sup>th</sup> September 2022 and 24<sup>th</sup> October 2022. Several pairs probably bred at the Park and elsewhere in the recording area, with fledged young reported from the Park and Holes Bay SW.

#### Redstart (Phoenicurus phoenicurus)

# A scarce passage migrant around Holes Bay.

A good series of records from several locations: singles on 18<sup>th</sup> and 25<sup>th</sup> August 2022 (both at PC World Drain), singles on 4<sup>th</sup> (PC World Drain),14<sup>th</sup> (Upton Country Park) and 28<sup>th</sup> September 2022 (Barclays Building) and 2 on 24<sup>th</sup> October 2022 at Holes Bay.

#### Stonechat (Saxicola rubicola)

A common breeding bird on nearby heaths but seen in the recording area mainly in autumn/spring and winter – when birds may occasionally be found on the shoreline or in the fields at Upton Country Park.



© Rene Goad

First winter period: 7 records usually of single birds on 4<sup>th</sup> and 16<sup>th</sup> January 2022, 3<sup>rd</sup> and 10<sup>th</sup> February 2022 and 4<sup>th</sup> (3 birds in two locations) and 10<sup>th</sup> March 2022. Most records from Upton Country Park (or Holes Bay NW) – with a single record from Holes Bay SW. Autumn/Winter: recorded on 1<sup>st</sup> July 2022 (saltmarsh in Holes Bay NW) thought to be a dispersing young bird and then on 14 dates from 20<sup>th</sup> September 2022 to 11<sup>th</sup> December 2022, usually 1-2 birds but 4 noted on 1<sup>st</sup> and 11<sup>th</sup> October 2022. Most records from Upton Country Park / Holes Bay NW, often from around the bird screen or fields behind.

# Wheatear (Oenanthe oenanthe)

An uncommon passage migrant, sometimes seen in areas such as Upton Country Park and along the Holes Bay Road.



© Nick Woods

Singles in spring on 17<sup>th</sup> April 2022 (Holes Bay NW) and 19<sup>th</sup> April 2022 (Holes Bay SE). Five autumn records: 2 on 29<sup>th</sup> August 2022 (Holes Bay south) and singles on 10<sup>th</sup>, 13<sup>th</sup> and 14<sup>th</sup> September 2022 (all at Holes Bay SW) and 16<sup>th</sup> September 2022 (Upton Country Park).

#### House Sparrow (Passer domesticus)

A once abundant bird that is known to have declined in many areas, probably still breeds in residential areas around Holes Bay and small flocks may be seen on the fringes of Upton Country Park.



© Martin Adams

Recorded in all months except November but maybe under-recorded. Noted on the edge of Upton Country Park near Symes Road and around Holes Bay, occasionally at the car park in the Park and near Roper's Lane. Usually recorded in small numbers (less than 30) but the following counts of 30 or more (all at Holes Bay SW): c150 on 16<sup>th</sup> January 2022, 30 on 22<sup>nd</sup> February 2022, 50 on 8<sup>th</sup> May 2022 and 30 on 18<sup>th</sup> October 2022. Likely to breed on the Hamworthy side of Holes Bay but no records of breeding received.

# **Dunnock** (Prunella modularis)

#### A widespread breeding resident.



© Martin Adams

Recorded in all months of the year, usually in small numbers (maximum count 9 on 1<sup>st</sup> February 2022 at Upton Country Park). Probably a common breeding bird, though only reported evidence was a report of fledged young in Upton Country Park on 12<sup>th</sup> July 2022.

Yellow Wagtail (Motacilla flava flavissima)

A scarce passage migrant in the recording area.



© Martin Adams

Three birds were seen in the field adjacent to Upton Park Farm on 19th and 20th September 2022.

Grey Wagtail (Motacilla cinerea)

Usually, a passage migrant or winter visitor, with one or two birds seen along the shoreline or on streams and ditches.



© Rene Goad

Small numbers (1-2) recorded on 22 dates in January-March, July and September-December 2022. Monthly bird-days shown below. Recorded from around Holes Bay and wet areas within the fields at Upton Country Park.

Monthly bird-days:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
4	4	2	-	-	-	1	-	9	1	1	7

Pied/White Wagtail (Motacilla alba)

A few pairs may breed and small parties are found on passage in winter, often in farm fields. Characteristic 'chis-ick' call often heard from birds flying over.

Recorded in January-April and July-September, usually in small numbers – though counts of around 100 were made on 21<sup>st</sup>, 26<sup>th</sup> and 27<sup>th</sup> January 2022 in Holes Bay south (thought to be a

roost assembling at/near the ASDA car park). The largest other count was a total of 12 birds in Upton Country Park on 24<sup>th</sup> October 2022. Fledged young were seen in the walled garden at Upton Country Park on 20<sup>th</sup> July 2022 and it is thought a pair bred in the vicinity. Although some observers recorded the birds as 'White Wagtails' there were no known records of the subspecies *alba*.

# Meadow Pipit (Anthus pratensis)

Seen on passage or in winter with occasional birds or small flocks seen, usually in grasslands or in farm fields.



© Rene Goa

Recorded in small numbers on 24 dates in January-March and September-December 2022. Maximum counts: c10 in Holes Bay SW on 21<sup>st</sup> January 2022, 12 in Holes Bay NW 27<sup>th</sup> November 2022 and 24 in one field at Upton Country Park on 12<sup>th</sup> December 2022 (the last being during in a period of unusually cold weather).

#### Water Pipit (Anthus spinoletta)

#### A scarce passage migrant or winter visitor with very few records.

Two records of single birds at Holes Bay on 12th and 31st January 2022.

# Rock Pipit (Anthus petrosus)

# Usually seen in winter along the shoreline, the rock used for coastal protection along the Holes Bay Road helping to provide suitable habitat.

Recorded on 17 dates in January-February and December 2022 (usually single birds but 2 on 10<sup>th</sup> January 2022). Monthly bird-days given below, most records from around Holes Bay, often along the Holes Bay Road.

#### Monthly bird-days:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6	3	-	-	-	-	-	-	-	-	-	9

# Chaffinch (Fringilla coelebs)

A widespread and common breeding species with small flocks sometimes found at Upton Country Park.



© Rene Goad

Present all year, usually in small numbers, highest counts 10 on 3<sup>rd</sup> January 2022 and 17<sup>th</sup> November 2022, both at Upton Country Park. Records of singing males at Upton Country Park included 3 on 22<sup>nd</sup> April 2022 and 5 on 1<sup>st</sup> June 2022 with fledged young seen there on 5<sup>th</sup> July 2022 – several pairs likely to have bred.

# Brambling (Fringilla montifringilla)

#### A very scarce winter visitor or passage migrant to the recording area.

Two (possibly 3) birds in Alders at Upton Country Park on 7<sup>th</sup> February 2022.

# Bullfinch (Pyrrhula pyrrhula)

Despite the colourful plumage of the male, the Bullfinch can be surprisingly inconspicuous and is probably under-recorded (helped by its weak song); may be seen all around the area and probably breeds.

One to two birds recorded on 15 dates in January-March, June-August and December 2022, with three birds on 1<sup>st</sup> June 2022. Most records from Upton Country Park, with a single record from the PC World Drain. No evidence of breeding, though this may have occurred.



**Bullfinch male © Martin Adams** 



**Bullfinch female © Martin Adams** 

One to two birds recorded on 15 dates in January-March, June-August and December 2022, with three birds on 1<sup>st</sup> June 2022. Most records from Upton Country Park, with a single record from the PC World Drain. No evidence of breeding, though this may have occurred.

#### Greenfinch (Chloris chloris)

A resident bird often breeding in loose colonies e.g., in the scrubby areas of Upton Country Park recently taken over from the adjacent farm.



© Martin Adams

Recorded in small numbers in all months of the year in Upton Country Park and in other areas around Holes Bay, maxima: 26 on19<sup>th</sup> February 2022 and 22 on 21<sup>st</sup> September 2022, both in Holes Bay south. Singing males reported in several locations.

# Linnet (Linaria cannabina)

Singing birds have been found along the edge of some of the fields of Upton Park Farm possibly indicating breeding. In winter flocks of 100 or more have also been recorded – possibly taking advantage of seeds from farming operations or weeds as areas have been taken out of agricultural production.

Recorded in Upton Country Park on 9 dates in April-July, October and December 2022, maximum count of 6 on 19<sup>th</sup> April 2022, maximum counts recorded have declined in the last few years, although singing birds were recorded on three occasions near the bird-screen: most records being from there and the field adjacent.

#### Goldfinch (Carduelis carduelis)

Probably breeds locally and flocks occur in autumn and winter.



© Nick Woods

Recorded in all months of the year with fledged young seen in Upton Country Park, suggesting possible breeding there. Small flocks regularly present, with maximum counts (all at Upton Country Park) of 33 on 7<sup>th</sup> February 2022 (one flock of 24 birds with others around the site), c30 on 14<sup>th</sup> February 2022 and 50 on 19<sup>th</sup> October 2022.

# Siskin (Spinus spinus)

# Small flocks occasional in winter in Upton Country Park, often feeding on the Alders planted at Upton Country Park.

Recorded on six dates in January-March, October and December 2022 (most records from Upton Country Park); usually of 1-4 birds with a maximum of 13 on 4<sup>th</sup> March 2022.

# Reed Bunting (Emberiza schoeniclus)

Although the male is strikingly marked, its song is easily overlooked but several pairs probably breed in the reed beds along the shoreline.

Records of 1-3 birds on 32 dates in all months except December 2022, singing birds reported in two places in the reedbed along the shoreline in Upton Country Park, with a probable family party there on 22<sup>nd</sup> August 2022, suggesting one or more pairs bred.



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#### **HOLES BAY BIRD CHECKLIST**

#### Stephen F. Smith

This list aims to include all the bird species that have occurred in the Holes Bay recording area since 1900 (currently standing at exactly 200)]. Some species are unlikely to be recorded again in the foreseeable future: Corncrake records are restricted to the early part of the 20<sup>th</sup> century, and Ruddy Duck has probably now been eradicated in Britain. Sadly, a growing number of species might be described as 'formerly common', but there are others which are thriving or increasing. These include Wigeon, Pintail, Shoveler, Spoonbill, Avocet, Black-tailed Godwit, Common Sandpiper, all three egret species, Osprey, Red Kite, Kingfisher and Firecrest. It is also very pleasing to see a wader list of 30 species: in this respect, Holes Bay can hold its head up beside its more glamorous rival Lytchett Bay!

# Gaps and unsolved mysteries

- No records could be found for Turtle Dove or Wood Warbler, which must surely have occurred at some time in the past.
- 12 or 13 small Canada Geese, believed to be Cackling Goose (*Branta canadensis minima*) were present from 23<sup>rd</sup> November to 1<sup>st</sup> December 1934, but due to the age and uncertain origin of the birds involved, the record has not been included in this checklist.
- Two reports of Dorset rarities did not appear in the DBR and are therefore not included here:
   Cirl Bunting on 30<sup>th</sup> October 1983 and Common Crane on 3<sup>rd</sup> October 2012.

Any information about these, or any other omissions, would be gratefully received.

#### References and abbreviations

BoD Green, G.P.: The Birds of Dorset. Helm, London, 2004

BoPH Birds of Poole Harbour species list

**DBR** Dorset Bird Reports

HBR Holes Bay Wildlife Reports 2020 – 22

IML Records provided by Ian Lewis

MA Records provided by Martin Adams

NW Records provided by Nick Woods

CW Records provided by Chris Walker

SFS Records provided by Stephen Smith

PCW PC World Drain, local name for Fleetsbridge Channel

**UCP** Upton Country Park

WeBS Wetland Bird Survey

All statistics in this list refer to Holes Bay, not Poole Harbour as a whole.

# Species list

1	Brent Goose	Winter visites, recent may 10 on 4th May 2021 [UDD]
1		Winter visitor; recent max 10 on 4th Mar 2021 [HBR]
2	Canada Goose	Common and increasing; max 455 in Nov 2015 [DBR]
3	Barnacle Goose	Rare winter visitor, presumed mainly feral birds
4	Greylag Goose	Occasional visitor; recent max 6 on 11th Oct 2021 [HBR]
5	Tundra Bean Goose	1988: 1, undated; 2021–22: 3 from 20th Dec to 1st Jan
6	White-fronted Goose	Rare winter visitor, most recently 2 on 7th Feb 2021 [HBR]
7	Mute Swan	Breeding resident; recent max 104 in Dec 2020 [WeBS]
8	Bewick's Swan	1988: 5 overhead on 30th Nov [DBR]
9	Black Swan	Occasional visitor; feral or escaped birds only
10	Egyptian Goose	Occasional visitor; feral birds only
11	Shelduck	Winter visitor and breeder, recent max 218 in Jan 2020 [WeBS]
12	Ruddy Shelduck	1986: 1 on 2nd Mar, of unknown origin [DBR]
13	Mandarin Duck	1 present for much of 1997 and Sep-Oct 2003 [DBR]
14	Garganey	Rare migrant; recent max 4 on 11th Apr 2018 [DBR]
15	Shoveler	Winter visitor, recent max 130 in Dec–Jan 2021–22 [HBR]
16	Gadwall	Regular non-breeding visitor in single figures
17	Wigeon	Winter visitor; all-time max 2534 in Dec 2018 [WeBS]
18	Mallard	Breeding resident
19	Pintail	Winter visitor; recent max 100 in Jan 2021 [HBR]
20	Teal	Numerous year-round visitor, recent max 515 in Nov 2021 [HBR]
21	Green-winged Teal	Most recent record 2013, 7th – 12th Feb [BoPH]
22	Red-crested Pochard	1 on 10th Nov 1984 and 19th Nov 1988, origin unknown
23	Pochard	Scarce winter visitor; most recent record 1 on 6th Feb 2020 [HBR]
24	Tufted Duck	Winter visitor in small numbers
25	Scaup	Scarce winter visitor, most recently 6, Jan–Feb 2020 [HBR]
26	Goldeneye	Scarce winter visitor, most recently 1 in Dec 2020 [HBR]
27	Smew	Rare winter visitor, most recently 1 in Jan–Feb 2017 [DBR]
28	Goosander	Rare winter visitor; most recent 1 on 30th Nov 2021 [HBR]
29	Red-breasted Merganser	Winter visitor, recent max 19 on 23rd Feb 2020 [HBR]
30	Ruddy Duck	Now presumed eradicated in UK; most recently 2 in late 1990s, undated [SFS]
31	Pheasant	Old records of released or feral birds
32	Red-legged Partridge	Old records of released or feral birds [NW]
33	Nightjar	Breeds on Upton Heath; only Holes Bay record 2008 [DBR]
34	Swift	Declining summer visitor, under-recorded
35	Cuckoo	Occasional records until 1989; rare thereafter [NW]
36	Rock Dove	Common breeding resident
37	Stock Dove	Common breeding resident in UCP; recent max 6 in Oct 2020 [HBR
38	Woodpigeon	Breeding resident; 750 at roost on Pergins Island, Dec 2021 [HBR]
39	Collared Dove	Resident in built-up areas, under-recorded
40	Water Rail	Resident, 2 – 3 pairs [BoPH survey 2013]
41	Corncrake	Shooting records from the early 1900s [NW]
42	Moorhen	Breeding resident
43	Coot	Occasional visitor
44	Little Grebe	Winter visitor; max 21 on 18th Nov 2014 [DBR]
45	Great Crested Grebe	Winter visitor; usual max about 10
46	Black-necked Grebe	Rare visitor, most recently 1 in Nov and Dec 2021
47	Oystercatcher	Resident, reaching 100 in winter
48	Avocet	Resident, reaching 100 in winter
		1 Heard and Leading 200 III Willes

49	Lapwing	Declining winter visitor, now rarely more than 10					
50	Golden Plover	Occasional visitor, most recently 14 on 18th Mar 2018					
51	Grey Plover	Scarce passage migrant; recent max 11 on 3rd Oct 2022					
52	Ringed Plover	Winter visitor, recent max 45 in autumn 2022					
53	Little Ringed Plover	1 on 26th Aug 2011 [DBR] and 1st Sep 2016 [CW]					
54	Dotterel	1961 Feb 12th: 1 in 'the inner harbour', local name for Holes Bay [DBR]					
55	Whimbrel	Passage migrant; recent max 8 on 6th May 2021 [HBR]					
56	Curlew	Migrant and winter visitor; recent max 122 on 23rd Feb 2020 [WeBS]					
57	Bar-tailed Godwit	1 – 2 birds recorded annually [HBR]					
58	Black-tailed Godwit	Numerous migrant and winter visitor, max 2000 on 25th Jan 2021 [HBR]					
59	Turnstone	Usually scarce, but recent max 10 on 11th Dec 2021 [HBR]					
60	Knot	Regular winter visitor, recent max 50, 2020–21 [HBR]					
61	Ruff	Irregular migrant, most recently 2020: 1 on 16th Aug [HBR]					
62	Curlew Sandpiper	Scarce migrant, most recently Oct 2022 [NW]					
63	Sanderling	2020: 22 on 12th Nov in NW sector seems to be the only record [HBR]					
64	Dunlin	Winter visitor; recent max 754 on 3rd Jan 2021 [HBR]					
65	Little Stint	Rare migrant, most recently 1 on 11th Sep 2019 [DBR]					
66	Woodcock	Winter visitor to UCP in small numbers [NW]					
67	Jack Snipe	Occasional winter visitor, mainly to industrial sites east of A350, now built on; latest record early 2017 [DBR]					
68	Snipe	Winter visitor, recent max 24 on 29th Mar 2021 [HBR]					
69	Wilson's Phalarope	1988: 1 on 20th June [DBR]					
70	Grey Phalarope	2004: 1 on 22nd Nov [DBR]					
71	Common Sandpiper	Migrant, increasing: max 10 on 18th Aug 2020 [HBR]					
72	Green Sandpiper	Scarce migrant, usually in Creekmoor Channel [HBR]					
73	Redshank	Migrant and winter visitor; recent max 354 on 18th Aug 2020 [HBR]					
74	Spotted Redshank	Historical max 8 in early 2007 [DBR]; now annual max of 1-2					
75	Greenshank	Singles in 2021, but some habitat east of A350 now built on [HBR]					
76	Collared Pratincole	1977: 1 on 24th May [DBR]					
77	Black-headed Gull	Ever-present; 1000 on 2nd Jan 2015 [DBR]					
78	Little Gull	2016: 1 in early Jan after storm, undated [DBR]					
79	Mediterranean Gull	Regular visitor; recent max 51 on 11th Apr 2021 [HBR]					
80	Common Gull	Usually present in small numbers					
81	Ring-billed Gull	Most recent record 1, 3rd–9th Apr 1994 [DBR]					
82	Great Black-backed Gull	Usually present in small numbers					
83	Iceland Gull	Most recent record 1 on 24th Apr 2016 [DBR]					
84	Herring Gull	Ever-present					
85	Yellow-legged Gull	Max 312 in Sep 2001 [DBR]; now mainly single figures					
86	Lesser Black-backed Gull	Ever-present					
87	Sandwich Tern	Regular visitor throughout year					
88	Little Tern	Included in a list of records 1980-83, but no other details [NW]					
89	Roseate Tern	2021: 1 probable on 3rd Sep [HBR]					
90	Common Tern	Occasional wanderers from Brownsea, usually single birds					
91	Black Tern	1996: 1 on 11th May [DBR]					
92	Red-throated Diver	Most recent record 1 on 5th Jan 2015 [DBR]					
93	Great Northern Diver	Single birds, most recently Dec 2020 [HBR]					
94	Leach's Petrel	1991: 1 on 9th Jan [DBR]					
95	White Stork	2021: 30 on 16th Dec, from Knepp reintroduction project [HBR]					
96	Cormorant	Ever-present, mainly in south; occasionally up to 200 [HBR]					
97	Shag	Most recent records Jan 2020 [HBR]					

98	Glossy Ibis	2010: 1 on Aug 13th [DBR]
99	Spoonbill	Increasing winter visitor; max 12 on 29th Nov 2016 [BoPH]
100	Bittern	Rare winter visitor; most recent 1 on 30th Nov 2012 [DBR]
101	Cattle Egret	2007: 1 and 2021: 2 on 22nd Apr in farm fields [HBR]
102	Grey Heron	Common resident; recent max 17 on 27th Sep 2020 [HBR]
103	Great White Egret	Now regular: most recent records 2019, undated [DBR]
104	Little Egret	Now ever-present; recent max 105 on 18th Aug 2020 [HBR]
105	Osprey	Increasing migrant, mainly in late summer and autumn [HBR]
106	Honey-buzzard	1997: 1 on 24th May [DBR]
107	Sparrowhawk	Common resident; may breed on Pergins Island
108	Goshawk	2007: 1 on 19th Feb [DBR]
109	Marsh Harrier	Scarce but increasing autumn and winter visitor: most recent 1 in Nov 2022 [HBR]
110	Hen Harrier	2020: 1 probable on 19th and 21st Nov [HBR]
111	Red Kite	Increasingly frequent sightings of birds overhead
112	White-tailed Eagle	2021: 1 on 22nd Mar and 29th Sep [HBR]
113	Buzzard	Common resident, breeding locally
114	Barn Owl	Most recent record 1 on 20th Nov 2020 [HBR]
115	Little Owl	Most recent definite record 2008 [BoPH]
116	Short-eared Owl	1986: 1 on Pergins Island on 18th Apr [DBR]
117	Tawny Owl	Breeding resident; probably still one pair in Upton CP
118	Ноорое	2017: 1 on 21st Nov in Upton Country Park [DBR]
119	Kingfisher	Non-breeding visitor; 2 – 3 usually present
120	Lesser Spotted Woodpecker	Formerly bred UCP; most recent record spring 2017 [DBR]
121	Great Spotted Woodpecker	Breeding resident
122	Green Woodpecker	Breeding resident
123	Kestrel	Formerly common, now irregular [HBR]
124	Merlin	Rare visitor, most recently 1 on 2nd Mar 2016
125	Hobby	Scarce summer visitor; most recent record 2013 [NW]
126	Peregrine	Breeding species on tall buildings SE of Holes Bay
127	Jay	Resident
128	Magpie	Common resident
129	Jackdaw	Ever-present at Upton Farm
130	Rook	Normally present at Upton Farm
131	Carrion Crow	Numerous resident
132	Raven	Regular visitor
133	Waxwing	2011: 13 overhead on 20th Jan [DBR]
134	Coal Tit	Breeding resident
135	Marsh Tit	Declining, now rare: most recent record 1 in Jan 2022
136	Willow Tit	1984: 1 on 16th Apr [DBR]
137	Blue Tit	Common breeding resident
138	Great Tit	Common breeding resident
139	Bearded Tit	2016: 2 on 10th Feb [DBR]
140	Woodlark	Rare visitor; max 17 in Dec 1976, undated [BoD]
141	Skylark	Formerly bred; most recent record 1 on 10th Oct 2021 [HBR]
142	Sand Martin	Migrant; latest records summer 2022
143	Swallow	Common summer visitor, bred in walled garden 2021 [NW]
144	House Martin	Common summer visitor, breeding locally [HBR]
145	Cetti's Warbler	Breeding population estimated at 2 pairs [DBR 2017]
146	Long-tailed Tit	Common resident
147	Yellow-browed Warbler	Rare autumn migrant; most recently 1 on 19th Oct 2020 [HBR]

148	Willow Warbler	Passage migrant, mainly in late summer
		Common breeding visitor and migrant, with individuals of the race
149	Chiffchaff	tristis ('Siberian Chiffchaff') sometimes reported from the PC World
143		drain in winter.
150	Sedge Warbler	Scarce migrant: 1 on 27th Apr and 3rd May 2020 [HBR]
151	Reed Warbler	Breeding summer visitor, 20 singing in spring 2021 [HBR]
152	Grasshopper Warbler	Most recently 1 on 17th Aug 2021 in PCW Drain [HBR]
153	Blackcap	Breeding summer visitor
154	Garden Warbler	Migrant, recorded occasionally in PCW Drain
155	Lesser Whitethroat	1989: pair carrying food near Bascombe's Pond [NW]
156	Western Subalpine Warbler	2013: 1 seen on 19th Apr in PCW Drain [DBR]
157	Whitethroat	Scarce migrant; 1 pair bred in 2021 beside A350 [HBR]
158	Dartford Warbler	Most recent record 2021, 1 on 14th Oct
	Firecrest	Increasing migrant and winter visitor, presumed now also to breed
159		[HBR]
160	Goldcrest	Breeding species
161	Wren	Common breeding resident
162	Nuthatch	Common breeding resident
163	Treecreeper	Breeding resident, thinly distributed
164	Starling	Breeding resident
165	Song Thrush	Breeding resident, although declining
166	Mistle Thrush	Breeding resident, perhaps 2 – 3 pairs 2021 [DBR]
167	Redwing	Common winter visitor; 100 on 19th Jan 2013 [DBR]
168	Blackbird	Common breeding resident
169	Fieldfare	Winter visitor; max 200 on 21st Jan 2013 [DBR]
170	Ring Ouzel	2016: 1 on 6th Oct in PCW Drain [DBR]
171	Spotted Flycatcher	Passage migrant; recent max 4 on 14th Sep 2022 [NW]
172	Robin	Common breeding resident
173	Nightingale	Most recent record 1 in UCP on 24th Apr 2011 [DBR]
174	Pied Flycatcher	Scarce migrant, most recently 1 on 12th Sep 2019 [DBR]
175	Black Redstart	2013: 1 in car park on several dates in Jan [NW]
176	Redstart	Migrant, most recently 1 on 8th Sep 2021 [HBR]
177	Whinchat	Migrant; most recent record 2018, 1 on 26th Aug [MA]
178	Stonechat	Migrant and winter visitor
179	Wheatear	Migrant, mainly on rocks beside A350 [HBR]
180	House Sparrow	Common breeding resident, esp on SW margins of bay
181	Dunnock	Common breeding resident
182	Yellow Wagtail	Declining passage migrant, under-recorded
183	Grey Wagtail	Regular non-breeding visitor, esp in PCW Drain in winter
184	Pied Wagtail	Common resident
185	Meadow Pipit	Common migrant and winter visitor
186	Tree Pipit	Migrant; records of 1-2 from 1980s, scarce thereafter [NW]
187	Water Pipit	Scarce winter visitor, most recently 1 on 11th Dec 2021 [HBR]
188	Rock Pipit	Regular winter visitor; recent max 14 on 11th Dec 2021 [HBR]
189	Chaffinch	Breeding resident, although declining
190	Brambling	Scarce winter visitor, most recent 1 on 6th Jan 2019 [DBR]
191	Hawfinch	2017: 3 on 15th Oct during major national influx [DBR]
192	Bullfinch	Pairs present in breeding season [DBR 2019]
193	Greenfinch	Breeding resident in UCP [DBR 2019]
194	Linnet	Breeding species; recent max 200 on 17th Feb 2019 [DBR]
195	Lesser Redpoll	Winter visitor; recent max 30 on 20th Jan 2017 [DBR]

196	Crossbill	1 on 1st Sep 1984; 10 overhead on 18th Feb 2006 [IML]					
197	Goldfinch	common resident; recent max 30 in Aug 2021 [HBR]					
198	Siskin	Winter visitor; recent max 20 on 10th Jan 2016 [DBR]					
199	Yellowhammer	Old records, most recent 1 singing on 13th Apr 1985 [NW]					
200	Reed Bunting	Present in reedbeds; latest breeding record 2018 [DBR]					

# VASCULAR PLANTS OF HOLES BAY BETWEEN THE EASTERN GATE OF UPTON COUNTRY PARK AND STERTE: APRIL-JULY 2022

# Stephen F. Smith

This article is an update to the surveys which have been carried out along the verge of the A350 by Bryan Edwards in 2000, by Robin Walls in 2015 and myself in 2021. The results of these surveys were summarised in last year's Holes Bay Nature Park Report. Over the past two years this area has been left unmown by Poole Borough Council, and a varied flora has been able to develop.

The very hot dry weather meant that summer of 2022 was not a good one for plant diversity, and there are therefore not many species to add to those noted in previous surveys. Among these additions are Sulphur Cinquefoil and Corky-fruited Water-dropwort, the latter also being noted in the cleared area beside Bascombe's Wood. Some of the more interesting species continue to prosper: among these is Kidney Vetch, the foodplant for the Small Blue *Cupido minimus*, a butterfly which continues to be recorded around the margins of Holes Bay. Sadly, no Bee Orchids or Broomrapes were found this year, but Pyramidal Orchid broke records with 279 flower-heads as opposed to c.200 last year.

I am very grateful to the local authority for its management and mowing policy, and very much hope that this will continue in the coming years. However, it is becoming clear that action is needed to control invasion by Bramble, Poplar and the invasive Japanese Rose.

# Areas surveyed [see Maps 1 and 2]

Starting at Sterte, the southernmost point, the following nine areas were surveyed:

Area 01: the large open area between SZ 0062 9166 and SZ 0081 9142, extending north-east as far as the A350 and closest to the pedestrian crossing

Area 02: 'the orchid site' between the motorway sign and SZ 0062 9166. Although this site may seem to be arbitrarily defined, it has been kept separate here because of the

stand of Pyramidal Orchids found here in 2019

Area 03: between the cycleway junction at SZ 0064 9201 and the motorway sign at SZ 0062

9173

Area 04: between the railway and the cycleway junction at SZ 0064 9201

Area 05: all open grassland between PC World Drain and the railway

Area 06: between SZ 0045 9282 and the PC World Drain

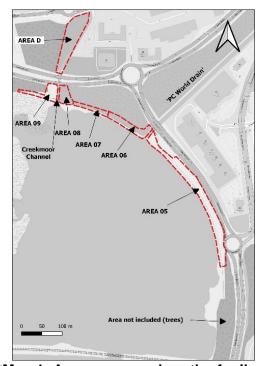
Area 07: between the two channels, SZ 0033 9287 to SZ 0045 9282

Area 08: between Creekmoor Channel and SZ 0033 9287

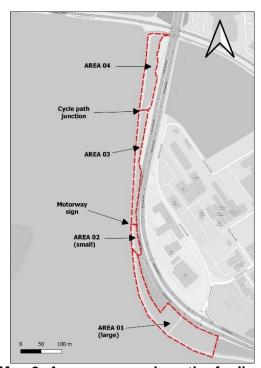
Area 09: the western side of Creekmoor Channel as far as the gate to Upton Country Park

Area D: derelict land along western side of Creekmoor Channel, between A350 and A35

(Not surveyed in 2022)



\*Map 1: Areas surveyed north of railway



\*Map 2: Areas surveyed south of railway

\*Map data from OpenStreetMap ©OpenStreetMap contributors



Pyramidal Orchid being crowded out by invasive Japanese Rose, June 2022



New growth of Southern Reed in area 03 June 2022



New growth of Corky-fruited Water-Dropwort behind new reedbed in area 03, June 2022

# **Systematic list**

2022. Surveys were not systematic in 2022, and a blank square for that year means that no information was available in that year.

# Key:

p = present - = not found

? = identification uncertain

A blank in the 2022 column means that the species was not found in 2022, although it may well have been present but overlooked because of time constraints or drought conditions.

Common Name	Scientific Name	2000	2015	2021	2022
		[BE]	[RMW]	[SFS]	[SFS]
Meadow Buttercup	Ranunculus acris	-	р	4	
Creeping Buttercup	Ranunculus repens	р	р	09, 06	р
Bulbous Buttercup	Ranunculus bulbosus	-	-	02, 01	
Hairy Buttercup	Ranunculus sardous	р	р	D	
Common Poppy	Papaver rhoeas	р	р	04, 03	р
Common Ramping-fumitory	Fumaria muralis	-	р	-	
Common Nettle	Urtica dioica	р	р	-	
Babington's Orache	Atriplex glabriuscula	-	р	?	
Common Orache	Atriplex patula	р	-	?	
Sea Purslane	Atriplex portulacoides	р	-	03, 01	1
Sea Beet	Beta vulgaris	р	р	2	2
Lesser Sea-Spurrey	Spergularia marina	р	-	-	
Greater Sea-Spurrey	Spergularia media	-	-	5	
Soapwort	Saponaria officinalis	-	р	-	
White Campion	Silene latifolia	-	р	1	4
Lesser Stitchwort	Stellaria graminea	-	-	5	
Common Mouse-ear	Cerastium fontanum	-	р	р	
Sticky Mouse-ear	Cerastium glomeratum	-	р	09, 02	
Thyme-leaved Sandwort	Arenaria serpyllifolia	-	р	-	
Redshank	Persicaria maculosa	р	-	-	
Knotgrass	Polygonum aviculare	р	-	-	
Common Sorrel	Rumex acetosa	р	р	р	
Sheep's Sorrel	Rumex acetosella	-	-	5	
Curled Dock	Rumex crispus	р	р	03, 09	
Perforate St John's-wort	Hypericum perforatum	р	р	D	
Common Mallow	Malva sylvestris	р	-	-	р
Musk Mallow	Malva moschata	-	-	-	3
Field Pansy	Viola arvensis	р	-	-	
Hairy Bitter-cress	Cardamine hirsuta	р	-	-	
Shepherd's-purse	Capsella bursa-pastoris	р	-	р	
Lesser Swine-cress	Coronopus didymus	р	-	-	
Black Mustard	Brassica nigra	р	р	-	
Charlock	Sinapis arvensis	-	р	р	
Hedge Mustard	Sisymbrium officinale	-	-	3	
Wild Radish	Raphanus raphanistrum	-	-	-	1 in 04
American Winter-cress	Barbarea verna	-	р	-	
Weld	Reseda luteola	р	-	-	
Wild Mignonette	Reseda lutea	-	-	1	1
White Mignonette	Reseda alba	р	-	-	

English Scurvygrass	Cochlearia anglica	-	р	07, 03	
Danish / Early Scurvygrass	Cochlearia danica	-	p	-	7
Biting Stonecrop	Sedum acre	-	p	06, 05	
Yellow Loosestrife	Lysimachia vulgaris	_	<u> </u>	-	4
Scarlet Pimpernel	Anagallis arvensis	р	-	3	
Dog Rose	Rosa canina	-	-	9	р
				р	'
Japanese Rose	Rosa rugosa	_	р	[invasive]	р
Bramble	Rubus fruticosus	р	p	р	р
Creeping Cinquefoil	Potentilla reptans	р	р	р	р
			<u> </u>	P	5 plants
Sulphur Cinquefoil	Potentilla recta	-	-	-	01
Broom	Cytisus scoparius	р	р	р	
Western Gorse	Ulex europeus	р	p	p	р
Common Birdsfoot Trefoil	Lotus corniculatus	р	 р	com	p
Large Bird's-foot Trefoil	Lotus pedunculatus	р		com	р
Hairy Bird's-foot Trefoil	Lotus subbiflorus	р	_	_	I-
Hop Trefoil	Trifolium campestre	-	р	_	numerous
Lesser Trefoil	Trifolium dubium	_	<u>р</u>	com	
Red Clover	Trifolium pratense	_	<u>р</u>	com	р
White Clover	Trifolium repens	_	<u>р</u>	com	р
Knotted Clover	Trifolium striatum	_	р	-	P
Subterranean Clover	Trifolium subterraneum	_	<u>р</u>	_	
Hare's-foot Clover	Trifolium arvense	_	<u> </u>	1	
Common Vetch	Vicia sativa	р	n	com	n
Tufted Vetch	Vicia sativa  Vicia cracca		р	com	p
Grass Vetchling	Lathyrus nissolia	р		com	р
Meadow Vetchling	Lathyrus pratensis		p	COIII	
Hairy Tare	Vicia hirsuta	n	p	D, 02, 01	
Smooth Tare	Vicia tetrasperma	р	p	D, 02, 01	
Broad-leaved Everlasting-pea	Lathyrus latifolius	р		9	n
Tall Melilot	Melilotus altissimus	-	р	9	р
		p	-	-	
White Melilot	Melilotus albus	р		-	4
Ribbed Melilot	Melilotus officinalis	-		-	4
Spotted Medick	Medicago arabica	р	р	com	
Black Medick	Medicago lupulina	р	р	9	2
Lucerne	Medicago sativa	-	-	02, 03	3
Mida av Matala	A sette ellie e selene see sie		_	D, 09, 08,	increase
Kidney Vetch	Anthyllis vulneraria	р	р	04, 01	in 01
Large-flowered Evening- primrose	Oenothera glazoviana	n	n		a few
Annual Mercury	Mercurialis annua	р	p	-	alew
Pale Flax	Linum bienne	- n	p	com	
	Geranium dissectum	р	p	com	
Cut-leaved Crane's-bill	Geranium dissectum	р	р	09, 06,	
Dove's-foot Crane's-bill	Geranium molle	n	n	09, 00,	
Round-leaved Crane's-bill	Geranium rotundifolium	p	p n	D, 05	
Herb-robert	Geranium rotundilonum	-	p n	06, 05	
			p p		
Corp Parsley	Anthriscus sylvestris Petroselinum siletum	-	<u>р</u>	09, 04	
Corn Parsley		-	p	-	
Hogweed	Heracleum sphondylium	-	р	_	

					abundant
Fennel	Foeniculum vulgare	р	р	04, 01	04, 01
Hemlock Water-dropwort	Oenanthe crocata	-	р	04, D	•
Corky-fruited Water-dropwort	Oenanthe pimpinelloides	-	-	-	03, 01
Wild Carrot	Daucus carota	р	р	09, 02	•
Rock Samphire	Crithmum maritimum	-	-	3	
Rough Chervil	Chaerophyllum tenelum	-	р	-	
Wild Parsnip	Pastinaca sativa	р	р	5	
Common Centaury	Centaurium erythraea	р	р	-	03, 02
Bittersweet	Solanum dulcamara	р	р	9	,
Hedge Bindweed	Calystegia sepium	-	р	р	
Field Forget-me-not	Myosotis arvensis	_	р	09, 05	
Wood Forget-me-not	Myosotis sylvatica	_		5	
Early Forget-me-not	Myosotis ramosissima	_	_	4	
Green Alkanet	Pentaglottis sempervirens	_	р	4	
Green Aikanet	T Cittaglottis scripervirens		Р	7	01
Viper's-bugloss	Echium vulgare	р	_	1	increase
Hedge Woundwort	Stachys sylvatica		_	_	IIICICase
Marsh Woundwort	Stachys palustris	р	_	5	
Red Dead-nettle	Lamium purpureum	- n	- n	9	
Buck's-horn Plantain		р	р		
	Plantago coronopus	-	р	09, 03	
Greater Plantain	Plantago maior	р	-	-	
Ribwort Plantain	Plantago lanceolata	р	-	com	
Sea Plantain	Plantago maritima	р	-	3	
Purple Toadflax	Linaria purpurea	р	-	-	
Foxglove	Digitalis purpurea	р	-	-	
Germander Speedwell	Veronica chamaedrys	-	-	com	
Common Field Speedwell	Veronica persica	р	-	2	
Thyme-leaved Speedwell	Veronica serpyllifolia	-	-	6	
Hedge Bedstraw	Galium molugo	-	р	-	
Cleavers / Goosegrass	Galium aparine	р	р	4	
Red Bartsia	Odontides vernus	-	р	-	
Field Madder	Sherardia arvensis	р	-	-	
					serious
Common Broomrape	Orobanche minor	-	-	1	decrease
Keeled-fruited Cornsalad	Valerianella carinata	-	р	-	
Wild Teasel	Dipsacus fullonum	р	р	com	р
Field Scabious	Knautia arvensis	-	р	-	
Common Ragwort	Senecio jacobaea	р	р	com	р
Oxford Ragwort	Senecio squalidus	р	р	?	
Sticky Groundsel	Senecio viscosus	р	-	-	
	Tripleurospermum				
Scentless Mayweed	inodorum	р	-	-	
Sea Aster	Aster tripolium	р	р	7	
Ox-eye Daisy	Leucanthemum vulgare	р	р	1	р
Daisy	Bellis perennis	р	р	com	
Yarrow	Achillea millefolium	р	-	com	р
Mugwort	Artemisia vulgaris	р	р	р	
Pineapple-weed	Matricaria discoidea	р	-		
Spear Thistle	Cirsium vulgare	р	р	5	р
Musk Thistle	Cirsium nutans	р		-	_

Creeping Thistle	Cirsium arvense	р	р	com	
Common Knapweed	Centaurea nigra	р	р	com	р
Greater Knapweed	Centaurea scabiosa	р	-	08, 03	
				1,	
Cornflower	Centaurea cyanus	р	-	[escape]	
Lesser Burdock	Arctium minus	-	-	-	1 plant 04
Cat's-ear	Hypochaeris radicata	р	р	-	
Lesser Hawkbit	Leontodon saxatilis	р	-	1	
Beaked Hawk's-beard	Crepis vesicaria	р	р	ı	
Smooth Hawk's-beard	Crepis capillaris	р	-	-	
Bristly Ox-tongue	Picris echioides	р	-	5	3
Prickly Lettuce	Lactuca serriola	-	-	-	
Dandelion	Taraxacum sp.	р	р	com	
Goat's-beard	Tragopogon pratensis	-	р	-	
Prickly Sow-thistle	Sonchus asper	р	р	-	
Smooth Sow-thistle	Sonchus oleraceus	р	р	-	
Rosy Garlic	Allium roseum	-	р	05, 04	
Wild Onion	Allium vineale	р	-	-	01, 04
					02: 86 fl-
				02, 01	hds
				ca. 200	01: 193 fl-
Pyramidal Orchid	Anacamptis pyramidalis	-		fl-hds	hds
Bee Orchid	Ophrys apifera	-	-	05, 01	
					new
					patch in
Southern Reed	Phragmites australis	-	-	-	03

# FLORA RECORDED AROUND BASCOMBE'S WOOD AND POND - 2022

# Stephen F. Smith

# Vascular plants

Common Name	Scientific Name	Notes
Meadow Buttercup	Ranunculus acris	widespread
Lesser Celandine	Ranunculus ficaria	widespread
Common Nettle	Urtica dioica	present
Red Campion	Silene dioica	widespread
Lesser Stitchwort	Stellaria graminea	fairly numerous
Broad-leaved Dock	Rumex obtusifolia	widespread
Rose-of-Sharon	Hypericum calycinum	present [non-native]
Wavy Bittercress	Cardamine flexuosa	present
Bramble	Rubus fruticosus	widespread
Greater Birdsfoot-trefoil	Lotus pedunculatus	widespread
Purple Loosestrife	Lythrum salicaria	two patches
Broad-leaved Willowherb	Epilobium montanum	widespread in shade
Enchanter's-nightshade	Circaea lutetiana	present
lvy	Hedera helix	widespread
Lesser Pignut	Conopodium majus	present
Hogweed	Heraclium sphondylium	thinly distributed
Hemlock Water-dropwort	Oenanthe crocata	widespread
Corky-fruited Water-dropwort	Oenanthe pimpinelloides	one patch close to cycleway
Bittersweet	Solanum dulcamara	a few plants
Hedge Bindweed	Calystegia sepium	widespread
Wood Forget-me-not	Myosotis sylvatica	present in cleared area
Ground-ivy	Glecome hederacea	widespread under trees
Marsh Bedstraw	Galium palustre	a few plants
Teasel	Dipsacus fallonum	a few present
Heath Groundsel	Senecio sylvaticus	some dense patches
Common Fleabane	Pulicaria dysenterica	fairly numerous
Spear Thistle	Cirsium vulgare	present
Marsh Thistle	Cirsium palustre	numerous in cleared area
Creeping Thistle	Cirsium arvense	present
Dandelion sp.	Taraxacum agg.	present
Bristly Ox-tongue	Picris echioides	present in patches
Wild Arum / Lords-and-Ladies	Arum maculatum	present
Bulrush / Reedmace	Typha latifolia	present beside pond
Hybrid Bluebell	Hyacinthoides x massartiana	[non-native]
Sedge sp.		
Juncus sp.		





Flowers: a dense, flat-topped umbel with rays noticeably **stout** and straight.

Leaves: linear and strap-shaped, divided into two

# Corky-fruited Water-dropwort: a white umbellifer of the Carrot family at Bascombe's Wood, Upton Country Park Dorset, 13th June 2022

# **Trees**

Common Name	Scientific Name	Notes
English Oak	Quercus sp	
Alder	Alnus glutinosa	
Sycamore	Acer pseudoplatanus	
Silver Birch	Betula pendula	
Hazel	Corylus avellana	
Elder	Sambucus nigra	
Cherry	Prunus sp	
Holly	Ilex aquifolium	
Field Maple	Acer campestre	
Snowy Mespilus/		
Juneberry/Serviceberry	Amelanchier canadensis	non-native
		2, one each side of cycleway
Wild Service Tree	Sorbus torminalis	(identified by Nick Woods)

#### MOTHS RECORDED IN UPTON COUNTRY PARK AND HOLES BAY IN 2022

# Sally Grant, Tony Grant and Nick Woods

During 2022 two moth traps were operated at Upton Country Park (UCP); a Robinson-style trap with a 125-watt mercury-vapour bulb ('the mv trap'), and a Skinner-style trap ('the actinic trap') with two 20-watt actinic bulbs. Trapping was carried out in the same location as in 2020 and 2021, with the actinic trap also operated for a few hours in the Suitable Accessible Natural Greenspace (SANG) Phase 2. There has also been an increase in casual field records of moths by the authors, Martin Adams and staff at UCP. These are primarily of larvae or of day-flying moths. Such observations are welcomed by anyone. Please email details and photographs to: saligee@btinternet.com.

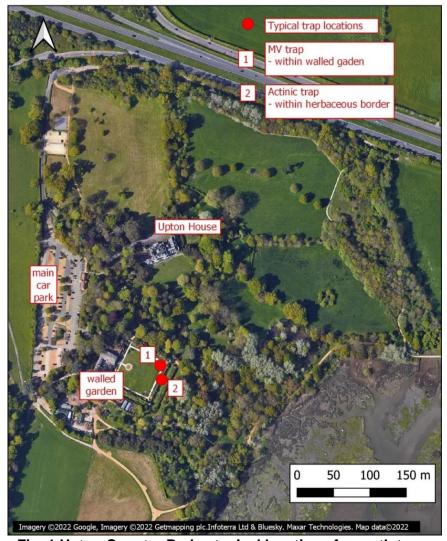


Fig. 1 Upton Country Park – typical locations for moth traps

The traps were usually left overnight in the walled garden or adjacent herbaceous border as this area is secure. The approximate locations are shown as '1' and '2' in Fig. 1 which also gives an idea of the nearby habitats. The walled garden is largely amenity grass (turfed in 2012) with small beds of ornamental planting and is surrounded by areas of formal gardens and ornamental pleasure grounds. This area itself is set in a larger area of former parkland with some veteran oak trees and unimproved or semi-improved grassland and much mixed woodland, mainly of plantation origin. Slightly further away are the saltmarsh, reed beds and mudflats of Holes Bay. On the landward side the site is surrounded by grazed pasture or former farmland, much of which has recently been laid down to grass with substantial areas of native tree and shrub planting to form a 'SANG.

The walled garden is popular with visitors and adjacent to the Park's tearooms. The catch from the traps was examined early in the morning in the walled garden and the opportunity taken to show different species to interested members of the public. The moths were released as quickly as possible.



MV Moth Trap: Walled Garden at Upton Country Park

Records of the moths identified were entered on the 'Living Record' online recording system, used by the Dorset Environmental Records Centre (DERC), from which the National Moth Recording Scheme can draw records. Records submitted in this way are subject to verification by local experts but this report has been prepared prior to completion of this process.

In this article the first mention of a particular species will usually include both English and scientific names. Later mentions will use only the English name for those relatively well-known, usually larger, species typically regarded as 'macro-moths'. As the English names used for many 'micro-moths' are less well known, the scientific names are used for those species. There are a few exceptions, including the increasingly well-known micro-moth, the Box-tree Moth (*Cydalima perspectalis*) for which the English name will be used.

# New for Site (NFS) and "Historical Records"

Since 2020 moth surveys have been carried out at UCP on a regular basis. However, we are fortunate to have moth counts dating from the 70s, 80s, 90s and 2000s which we have referred to when collating this report.

It is interesting to note that these "historical" records were mostly from traps set within the walled garden, but also on the roof of Upton House. On one occasion, only the number of species was recorded. In this case each species has been listed as one individual. Also, whilst micros would certainly have been present, very few have been listed in these records. A few moths that are difficult to identify without dissection have been recorded as aggregate (agg.) species.

Taking these "historical" records into account allows us to state with a little more certainty the species of moth that have not been formally recorded on-site before. Whilst many of the moths not listed are likely to have been present, for the purposes of this report we have referred to them as New for Site (NFS).

In 2022 we recorded a respectable 43 species not seen in 2020 or 2021, and 76 not included in the earlier records for the site. 34 trappings were carried out in 2021, against 27 in 2022, so the increase in numbers is more likely due to the long period of dry weather during the summer of 2022.

Conversely, there were 96 species recorded in earlier years that have not been recorded since 2020.

#### **Outline results**

Appendix 1 at the end of this article lists the 306 moth taxa recorded in 2022, alongside records for previous years. The list includes moths recorded in the field as well as those trapped. Most moths were identified to species level though a few critical species were only recorded as aggregates and a few only to genus level.

In 2022 either or both traps caught moths on 27 dates from 9<sup>th</sup> March 2022 to 9<sup>th</sup> November 2022. The mv and the actinic trap both caught moths on 25 dates (there were one or two dates on which no moths were caught but these were not recorded). The number of taxa identified from the traps in each month in 2022 and the number of trapping sessions is shown in Fig 2. The previously published figures for 2021 were incorrect. Fig 2a shows the correct data.

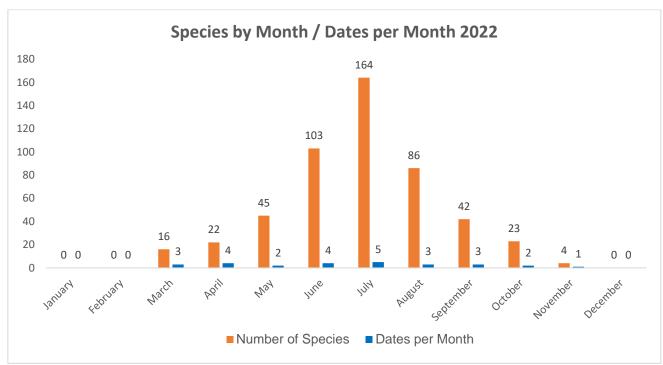


Fig. 2 Number of species trapped and number of trapping sessions 2022

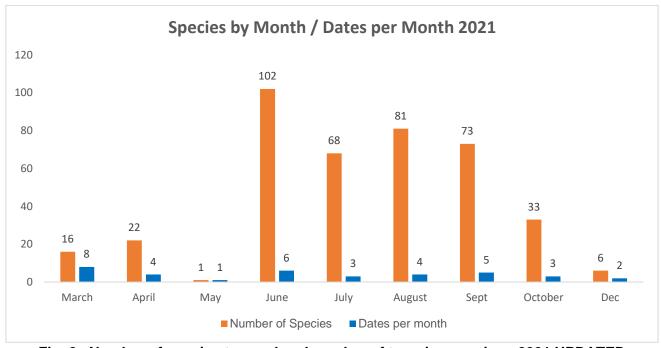


Fig. 2a Number of species trapped and number of trapping sessions 2021 UPDATED

In 2022 a total of 2320 adult moths of 297 species were recorded from the traps. The mv trap caught a total of 1,250 moths of 234 taxa on 25 dates and the actinic trap a total of 1033 moths of 204 taxa on 25 dates. There were 145 taxa identified from both types of trap, with 89 species identified unique to the mv trap and 59 unique to the actinic trap. There were also 19 moths of 11 species counted outside of the traps.

The 20 most trapped species in 2022 are shown in **Table 2** - compare with 2021 in **Table 3**.

Common Name	Scientific Name	Individuals
Common Quaker	Orthosia cerasi	151
Lesser Broad-bordered Yellow Underwing	Noctua janthe	80
Dark Arches	Apamea monoglypha	76
Large Yellow Underwing	Noctua pronuba	73
Rush Veneer	Nomophila noctuella*	72
Flame Shoulder	Ochropleura plecta	71
Box-tree Moth	Cydalima perspectalis*	53
Heart & Dart	Agrotis exclamationis	53
Double-striped Pug	Gymnoscelis rufifasciata	51
Setaceous Hebrew Character	Xestia c-nigrum	50
	Blastobasis adustella*	49
Shuttle-shaped Dart	Agrotis puta	38
Hebrew Character	Orthosia gothica	37
Common Rustic agg.	Mesapamea secalis agg.	36
Common Footman	Eilema lurideola	34
Marbled Minor agg.	Oligia strigilis agg.	33
Small Quaker	Orthosia cruda	33
	Chrysoteuchia culmella*	31
Treble Lines	Charanyca trigrammica	28
Black Arches	Lymantria monacha	27
	Coleophora sp.*	27
Vine's Rustic	Hoplodrina ambigua	26
Bright-Line Brown-Eye	Lacanobia oleracea	25
Brussels Lace	Cleorodes lichenaria	25

Table 2 Twenty most prevalent trapped species 2022

The twenty most trapped species accounted for 1179 (41%) of the total catch of 2320 moths. The Common Quaker represented 5.35% of moths caught in traps; whereas the field record of Six-Spot Burnet 414 totalled 14.61% of all the moths recorded for 2022.

At the same time 106 taxa were only caught on a single occasion: 35.69% of the total taxa identified in 2022. Of the 309 taxa caught in the actinic trap ran in 2020-2021, 71 were not recorded at either trap in 2022.

Common Name	Scientific Name	Adults
Box-tree Moth	Cydalima perspectalis*	159
Large Yellow Underwing	Noctua pronuba	77
Common Quaker	Orthosia cerasi	58
	Chrysoteuchia culmella*	49
Treble Lines	Charanyca trigrammica	45
Heart & Dart	Agrotis exclamationis	42
Lesser Broad-bordered Yellow Underwing	Noctua janthe	42
Light Emerald	Campaea margaritaria	42
Hebrew Character	Orthosia gothica	38

Common Footman	Eilema lurideola	35
Willow Beauty	Peribatodes rhomboidaria	35
Dark Arches	Apamea monoglypha	26
Rosy Footman	Miltochrista miniata	25
Double-striped Pug	Gymnoscelis rufifasciata	23
Vine's Rustic	Hoplodrina ambigua	23
Dingy Footman	Eilema griseola	20
Flame Shoulder	Ochropleura plecta	20
Small Quaker	Orthosia cruda	20
Mother of Pearl	Pleuroptya ruralis	17
Riband Wave	Idaea aversata	17
Silver Y	Autographa gamma	17
Uncertain/Rustic agg.	Hoplodrina octogenaria/blanda	17
Buff-tip	Phalera bucephala	15
Setaceous Hebrew Character	Xestia c-nigrum	15
Brimstone Moth	Opisthograptis luteolata	14
Flame Carpet	Xanthorhoe designata	14
Mottled Rustic	Caradrina morpheus	14
Square-spot Rustic	Xestia xanthographa	14
Common Wainscot	Mythimna pallens	13
Green Carpet	Colostygia pectinataria	13
Snout	Hypena proboscidalis	13
Straw Dot	Rivula sericealis	13
Grey Pine Carpet	Thera obeliscata	12
Orange Footman	Eilema sororcula	12
	Blastobasis adustella*	12
Barred Sallow	Tiliacea aurago	11
Bright-Line Brown-Eye	Lacanobia oleracea	11
December Moth	Poecilocampa populi	11
Double Square-spot	Xestia triangulum	10
Lunar Underwing	Omphaloscelis lunosa	10
Maiden's Blush	Cyclophora punctaria	10
Sallow	Cirrhia icteritia	10
Poplar Hawk-moth	Laothoe populi	9
Shuttle-shaped Dart	Agrotis puta	9

Table 3 Twenty most prevalent trapped species 2021 \*micro

#### **Field Records**

Field Records account for 25 species, including larvae of 4 species, 512 individual adults, plus pupae of Six-spot Burnet, mostly from the Twin Sails area and along the Holes Bay Road, A35. The high count of 512 adults primarily comprises 414 Six-spot Burnet (*Zygaena filipendulae*) on 6 dates in June and July; the most for one date being 100 recorded on 13<sup>th</sup> July 2023 and 47 Burnet Companion (*Euclidia glyphica*) recorded during mid-May to mid-June 2023.

Common Name	Scientific Name	Adults	Larvae
Angle Shades	Phlogophora meticulosa		1
Box-tree Moth	Cydalima perspectalis*		4
Brimstone Moth	Opisthograptis luteolata	1	
Brown Silver-line	Petrophora chlorosata	2	
Burnet Companion	Euclidia glyphica	47	
Carnation Tortrix	Cacoecimorpha pronubana*	1	

Cinnabar	Tyria jacobaeae	10	
Clouded Border	Lomaspilis marginata	1	
Goat Moth	Cossus cossus		1
Humming-bird Hawk-moth	Macroglossum stellatarum	1	
Jersey Tiger	Euplagia quadripunctaria	15	
Mother Shipton	Euclidia mi	4	
Nettle-tap	Anthophila fabriciana*	1	
Pea Moth	Cydia nigricana*	1	
Privet Hawk-moth	Sphinx ligustri		1
Silver Y	Autographa gamma	1	
Six-spot Burnet	Zygaena filipendulae	414	+2xPupae
Treble-bar	Aplocera plagiata	1	
Yellow Belle	Aspitates ochrearia	1	
Yellow Shell	Camptogramma bilineata	2	
	Agriphila geniculea*	1	
	Agriphila tristella*	3	
	Celypha lacunana*	1	
	Oncocera semirubella*	3	
	Pyrausta aurata*	1	
25 Species		512	7

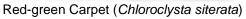
Table 4 Field Record of Species seen in 2022 \*micro

# **Macro moths**

201 macro-moth taxa were identified in 2022 out of approximately 900 species found in the UK1.









Angle Shades (Phlogophora meticulosa)



Sallow (Cirrhia icteritia)

Fig. 3 Some of the macro moths recorded at Upton County Park in 2022

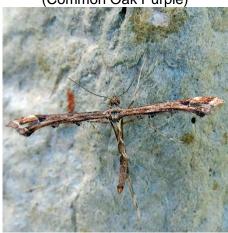
#### Micro moths

105 taxa of micro-moth were identified in 2022; a small proportion of around 1,600 species known from Britain.

Micro-moths, by definition, tend to be small, and not necessarily easy to identify. For more information about micro moths please see the *Holes Bay Nature Park for 2021*.



Dyseriocrania subpurpurella (Common Oak Purple)



Amblyptilia acanthadactyla (Beautiful Plume)



Scoparia basistrigalis (Base-lined Grey)



Evergestis forficalis (Garden Pebble)



Glyphipterix thrasonella (Speckled Fanner)



Tachystola acroxantha (Ruddy Streak)

Fig. 4 Some micro moths recorded at Upton County Park in 2022

## **Box-Tree Moth: Update**

Following the 2021 article concerning the Box-tree Moth, it was noted that larvae were present within the box hedging in the Walled Garden on 21st and 25th April 2022. However, only 53 adult moths were recorded on 12 occasions between April and November, compared with the 159 counted between August and October. The most seen on single dates was just 14 and 10; minimal compared with the 53 and 68 maximum counts in 2021.







Fig. 5 Box-tree Moth larvae and the damage they can cause

#### **Discussion and Conclusions**

The 201 macro-moths and 105 micro-moths recorded in 2022 represent around 22% and 6.5% respectively of the total number of species known from Great Britain. This is only a slight increase compared with 2020-2021.

The Atlas of Britain and Ireland's Larger Moths<sup>2</sup> indicates that between 451 and 500 species of macro-moth have been recorded from the 10 km national grid square (SY99) which, in its southeast corner, includes most of Upton Country Park. This square extends to Sturminster Marshall in the north and Morden in the west. As a result, the square will include records for a much wider range of habitats than is present in the Park, including as it does Upton Heath, Lytchett Bay, parts of Wareham Forest and the Stour Valley, areas which include some important wildlife habitats. However, it seems likely that a considerable number of moth species that may be present were not caught in 2022.

It is also interesting to look at the number of times individual species were recorded (see Fig. 6).

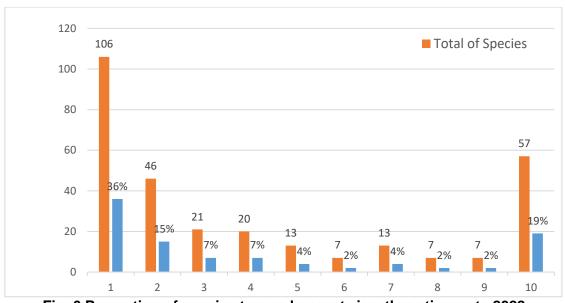


Fig. 6 Proportion of species trapped once, twice, three times etc 2022

36% of the species caught in 2022 were represented by a single moth and 15% by only two individuals. Given the trapping location, in an enclosed area within the formal gardens of the Park, away from the more natural habitats present, this also suggests that many more moth species may be present than is apparent from the trapping carried out so far.

Trapping will continue in 2023 at UCP, with plans to carry out trapping in areas outside of the walled garden.

## **Acknowledgements**

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Photographs in this article unless otherwise stated are by Tony Grant and Nick Woods.

#### References

- 1. "Moths" Butterfly Conservation website (<a href="https://butterfly-conservation.org/moths-0">https://butterfly-conservation.org/moths-0</a>).
- 2. "The Atlas of Britain and Ireland's Larger Moths", Randle, Z., Evans-Hill, L. j., Parsons, M. S., Tyner, A., Bourn, N.A.D., Davis A.M., Dennis, E.B., O'Donnell, M., Prescott, T., Tordof, G.M., and Fox, R 2019, Pisces Publications, Newbury.

# Appendix 1 Moths recorded at Upton Country Park pre-2020, 2020 to 2022

		Pre-				
Common Name	Scientific Name	2020	2020	2021	2022	TOTAL
Alder Moth	Acronicta alni				2	2
Angle Shades	Phlogophora meticulosa	22		3	7	32
Antler Moth	Cerapteryx graminis	3				3
Apple Leaf-miner	Lyonetia clerkella	1			14	15
August Thorn	Ennomos quercinaria	1		1		2
Autumnal Rustic	Eugnorisma glareosa	22				22
Barred Fruit-tree Tortrix	Pandemis cerasana	3	1	6	4	14
Barred Hook-tip	Watsonalla cultraria	3				3
Barred Marble	Celypha striana	1		4	5	10
Barred Red	Hylaea fasciaria	1				1
Barred Sallow	Tiliacea aurago	1		11	1	13
	Gandaritis pyraliata (Eulithis					
Barred Straw	pyraliata)	3				3
Beaded Chestnut	Agrochola lychnidis			2	2	4
Beautiful Hook-tip	Laspeyria flexula	2		7	3	12
Beautiful Plume	Amblyptilia acanthadactyla			1		1
Beautiful Yellow Underwing	Anarta myrtilli	1				1
Bee Moth	Aphomia sociella			1	2	3
Bird-cherry Ermine	Yponomeuta evonymella				7	7
Bird's Wing	Dypterygia scabriuscula	8		1	1	10
Black Arches	Lymantria monacha	7	4	3	27	41
Black Rustic	Aporophyla nigra	88		2	5	95
Black-headed Conch	Cochylis atricapitana	1			1	2
Blair's Shoulder-knot	Lithophane leautieri	3			2	5
Blood-Vein	Timandra comae	32		4	3	39
Blue-bordered Carpet	Plemyria rubiginata			1		1
Bordered Beauty	Epione repandaria	1				1
Bordered White	Bupalus piniaria	4				4
Box-tree Moth	Cydalima perspectalis		52	159	53	264
Bramble Shoot Moth	Notocelia uddmanniana			1	1	2
	Sunira circellaris (Agrochola					
Brick	circellaris)	4		1		5
Bright-Line Brown-Eye	Lacanobia oleracea	36		11	25	72
Brimstone Moth	Opisthograptis luteolata	58	2	14	7	81
Brindled Beauty	Lycia hirtaria			2	8	10
Brindled Green	Dryobotodes eremita	80		4	1	85
Brindled Pug	Eupithecia abbreviata	2		1		3
Brindled White-spot	Parectropis similaria			1		1
Broad-bordered Bee Hawk-moth	Hemaris fuciformis	1				1
Broad-bordered Yellow Underwing	Noctua fimbriata	28	9	3	9	49
Broken-barred Carpet	Electrophaes corylata			1	1	2
Broom Moth	Ceramica pisi	1				1
Brown China-mark	Elophila nymphaeata	3		2		5
Brown House-moth	Hofmannophila pseudospretella	1		2	2	5
Brown Rustic	Rusina ferruginea	7			1	8
Brown Silver-line	Petrophora chlorosata	8		1	2	11
Brown-spot Pinion	Anchoscelis litura	1				1

Brown-tail	Euproctis chrysorrhoea	4	1	1	1	7
Brussels Lace	Cleorodes lichenaria	2		8	25	35
Buff Arches	Habrosyne pyritoides	13		1	21	35
Buff Ermine	Spilosoma lutea	37			11	48
Buff Footman	Eilema depressa	9		3	5	17
Buff-tip	Phalera bucephala	41	1	15	9	66
Burnet Companion	Euclidia glyphica				48	48
Burnished Brass	Diachrysia chrysitis	11		1		12
Cabbage Moth	Mamestra brassicae	12		2	1	15
Canary-shouldered Thorn	Ennomos alniaria	4		3	2	9
Carnation Tortrix	Cacoecimorpha pronubana				1	1
Centre-barred Sallow	Atethmia centrago	2		3		5
Chequered Fruit-tree Tortrix	Pandemis corylana			4	4	8
Chestnut	Conistra vaccinii	33		3	3	39
Chinese Character	Cilix glaucata	2		1		3
Chocolate-tip	Clostera curtula	4			1	5
Cinnabar	Tyria jacobaeae	9			10	19
Clay	Mythimna ferrago	48			11	59
Clay Triple-lines	Cyclophora linearia	3	1		2	6
Clifden Nonpareil	Catocala fraxini				1	1
Cloaked Minor	Mesoligia furuncula	2			7	9
Clouded Border	Lomaspilis marginata	19	1	7	2	29
Clouded Drab	Orthosia incerta	4		3	16	23
Clouded Silver	Lomographa temerata	2		1	1	4
Clouded Slender	Caloptilia populetorum	1				1
Common Carpet	Epirrhoe alternata	23		2	1	26
Common Emerald	Hemithea aestivaria	16		1	2	19
Common Footman	Eilema lurideola	173	7	35	34	249
Common Lutestring	Ochropacha duplaris				1	1
Common Marbled Carpet	Dysstroma truncata	7		8	5	20
Common Nettle-tap	Anthophila fabriciana				1	1
Common Plume	Emmelina monodactyla				1	1
Common Pug	Eupithecia vulgata	4			4	8
Common Quaker	Orthosia cerasi	50		58	151	259
Common Rustic agg.	Mesapamea secalis agg.	128	2	8	36	174
Common Swift	Korscheltellus lupulina	152		3	1	156
Common Wainscot	Mythimna pallens	200		13	7	220
Common Wave	Cabera exanthemata	16			2	18
Common White Wave	Cabera pusaria	3			4	7
Copper Underwing	Amphipyra pyramidea	24				24
Copper Underwing agg.	Amphipyra pyramidea agg.		1	7	4	12
Coronet	Craniophora ligustri	1		1	20	22
Coxcomb Prominent	Ptilodon capucina				1	1
Cream Wave	Scopula floslactata	1				1
Cream-spot Tiger	Arctia villica	1				1
Crescent	Helotropha leucostigma			1		1
Crescent Striped	Apamea oblonga	15				15
Cyclamen Tortrix	Clepsis spectrana				1	1
Cypress Carpet	Thera cupressata	2				2
Dark Arches	Apamea monoglypha	96	2	26	76	200

Dark Brocade	Mniotype adusta	22				22
Dark Dagger	Acronicta tridens	21				21
Dark Fruit-tree Tortrix	Pandemis heparana		1	1	1	3
Dark Spectacle	Abrostola triplasia	1		1		2
Dark Sword-grass	Agrotis ipsilon	16		2	5	23
December Moth	Poecilocampa populi	35		11		46
Deep-brown Dart	Aporophyla lutulenta	2				2
Delicate	Mythimna vitellina				1	1
Diamond-back Moth	Plutella xylostella	6	1	2	4	13
Dingy Footman	Eilema griseola	35		20	19	74
Dingy Shears	Apterogenum ypsillon	3				3
Dog's Tooth	Lacanobia suasa	3				3
Dot Moth	Melanchra persicariae	10			2	12
Dotted Oak Knot-horn	Phycita roborella	1		1	9	11
Double Dart	Graphiphora augur	3				3
Double Lobed	Lateroligia ophiogramma				1	1
Double Square-spot	Xestia triangulum	18		10	16	44
Double-striped Pug	Gymnoscelis rufifasciata	40	1	23	51	115
Double-striped Tabby	Hypsopygia glaucinalis	1		1	1	3
Drinker	Euthrix potatoria	7				7
Dun-bar	Cosmia trapezina	115		2	6	123
Dusky Brocade	Apamea remissa	5			1	6
Dusky Thorn	Ennomos fuscantaria	5		2	7	14
Dwarf Cream Wave	Idaea fuscovenosa	5		2		7
Dwarf Pug	Eupithecia tantillaria	1				1
Ear moth agg.	Amphipoea oculea agg.	6		1	1	8
Early Grey	Xylocampa areola	1		6	2	9
Early Thorn	Selenia dentaria	11		2		13
Early Tooth-striped	Trichopteryx carpinata				1	1
Elephant Hawk-moth	Deilephila elpenor	15		1	7	23
Engrailed	Ectropis crepuscularia	9				9
Ermine sp.	Yponomeuta sp.			7	4	11
European Corn-borer	Ostrinia nubilalis				3	3
Fan-foot	Herminia tarsipennalis	3		4	8	15
Feathered Gothic	Tholera decimalis	1				1
Feathered Thorn	Colotois pennaria	46		1		47
Fen Wainscot	Arenostola phragmitidis	1			1	2
Festoon	Apoda limacodes	3		1		4
Figure of Eighty	Tethea ocularis	5		3	2	10
Five-spot Burnet	Zygaena trifolii	5				5
Flame	Axylia putris	19		4	12	35
Flame Carpet	Xanthorhoe designata	1	1	14		16
Flame Shoulder	Ochropleura plecta	105		20	71	196
Flounced Rustic	Luperina testacea	107	3	8	13	131
Four-dotted Footman	Cybosia mesomella	42				42
Four-spotted Footman	Lithosia quadra				12	12
Fox Moth	Macrothylacia rubi	8				8
Foxglove Pug	Eupithecia pulchellata	1		2		3
Freyer's Pug	Eupithecia intricata				1	1
Frosted Green	Polyploca ridens	8		6	13	27

Frosted Orange	Gortyna flavago	13				13
Garden Carpet	Xanthorhoe fluctuata	7	2		2	11
Garden Pebble	Evergestis forficalis				1	1
Garden Rose Tortrix	Acleris variegana			1		1
Garden Tiger	Arctia caja	8				8
Goat Moth	Cossus cossus	1				1
Gold Spot	Plusia festucae	1				1
Gothic	Naenia typica	14				14
Grass Emerald	Pseudoterpna pruinata	3				3
Great Prominent	Peridea anceps				1	1
Green Carpet	Colostygia pectinataria	21	3	13	2	39
Green Oak Tortrix	Tortrix viridana	3	_	2	_	5
Green Pug	Pasiphila rectangulata	7		3	3	13
Green Silver-lines	Pseudoips prasinana	7		3		10
Green-brindled Crescent	Allophyes oxyacanthae	,		1		1
Grey Arches	Polia nebulosa	5			3	8
Grey Pine Carpet	Thera obeliscata	33	1	12	7	53
Grey Pug	Eupithecia subfuscata	2			1	3
Hawthorn Moth	Scythropia crataegella	2			1	1
Hazel Slender	Parornix devoniella	1				1
Heart & Club	Agrotis clavis	14		1		15
Heart & Club	Agrotis exclamationis	720		42	53	815
		1 1	1	42	55	
Heath Rustic	Xestia agathina	3	1	20	27	4
Hebrew Character	Orthosia gothica	25		38	37	100
Herald	Scoliopteryx libatrix	3		3	2	8
Holly Tortrix	Rhopobota naevana			1	4	5
Hollyhock Seed Moth	Pexicopia malvella				2	2
Hook-streak Grass-veneer	Crambus lathoniellus	1				1
Horse Chestnut	Pachycnemia hippocastanaria	1				1
Humming-bird Hawk-moth	Macroglossum stellatarum				1	1
Ingrailed Clay	Diarsia mendica	20		1	6	27
Iron Prominent	Notodonta dromedarius	4			2	6
Jersey Tiger	Euplagia quadripunctaria			111	22	133
July Highflyer	Hydriomena furcata	14				14
Kent Black Arches	Meganola albula	1			2	3
Knot Grass	Acronicta rumicis	38		1	2	41
Lackey	Malacosoma neustria	7				7
L-album Wainscot	Mythimna l-album	4	1	4	8	17
Large Fruit-tree Tortrix	Archips podana	1		2		3
Large Wainscot	Rhizedra lutosa	19	2		4	25
Large Yellow Underwing	Noctua pronuba	668	34	77	73	852
Least Black Arches	Nola confusalis	1			2	3
Least Yellow Underwing	Noctua interjecta	4	1	1		6
Leek Moth	Acrolepiopsis assectella				1	1
Leopard Moth	Zeuzera pyrina	1				1
Lesser Broad-bordered Yellow						
Underwing	Noctua janthe	89	8	42	80	219
Lesser Common Rustic	Mesapamea didyma	8				8
Lesser Swallow Prominent	Pheosia gnoma	10		1	1	12
Lesser Yellow Underwing	Noctua comes	30	6	6	4	46
Light Arches	Apamea lithoxylaea	2				2

Light Brocade	Lacanobia w-latinum	4		2	1	7
Light Brown Apple Moth	Epiphyas postvittana	1	4	6	7	18
Light Emerald	Campaea margaritaria	54	8	42	15	119
Lime Hawk-moth	Mimas tiliae	1				1
Lime-speck Pug	Eupithecia centaureata	13		2	3	18
	Eudonia lacustrata (Dipleurina					
Little Grey	lacustrata)	1				1
Lobster Moth	Stauropus fagi	1				1
Lunar Marbled Brown	Drymonia ruficornis	3		3	3	9
	Anchoscelis lunosa (Omphaloscelis					
Lunar Underwing	lunosa)	630	17	10	12	669
Lychnis	Hadena bicruris	1		2	2	5
Magpie	Abraxas grossulariata	3				3
Maiden's Blush	Cyclophora punctaria	16		10	21	47
Many-plumed Moth (Twenty-						
plume Moth)	Alucita hexadactyla			1		1
Maple Pug	Eupithecia inturbata				2	2
Marbled Brown	Drymonia dodonaea	6			2	8
Marbled Minor agg.	Oligia strigilis agg.	19	1	5	33	58
Marbled Orchard Tortrix	Hedya nubiferana	2		1		3
	Protodeltote pygarga (Deltote					
Marbled White Spot	pygarga)	12		1	12	25
March Moth	Alsophila aescularia			2	8	10
Mathew's Wainscot	Mythimna favicolor	2				2
May Highflyer	Hydriomena impluviata				1	1
Merveille du Jour	Griposia aprilina	7		2	1	10
Middle-barred Minor	Oligia fasciuncula	10		1		11
Miller	Acronicta leporina	1		2	2	5
Mint Moth	Pyrausta aurata				1	1
Mother of Pearl	Patania ruralis (Pleuroptya ruralis)	18		17	8	43
Mother Shipton	Callistege mi (Euclidia mi)	6			4	10
Mottled Beauty	Alcis repandata	19		1	2	22
Mottled Rustic	Caradrina morpheus	78	4	14	11	107
Mottled Umber	Erannis defoliaria			1		1
Mullein	Cucullia verbasci	3				3
Mullein Wave	Scopula marginepunctata	11				11
Muslin Moth	Diaphora mendica	8		2	2	12
Narrow-winged Pug	Eupithecia nanata	2		2	5	9
Neglected Rustic	Xestia castanea	6				6
Netted Argent	Argyresthia retinella	1				1
November moth agg.	Epirrita dilutata agg.	12			2	14
Nutmeg	Anarta trifolii	6				6
Nut-tree Tussock	Colocasia coryli	1		1	10	12
Oak Beauty	Biston strataria	_		3	4	7
Oak Hook-tip	Watsonalla binaria	51	2	7	7	67
Oak Nycteoline	Nycteola revayana	7		1	3	11
Oblique Carpet	Orthonama vittata	'		1	3	1
Obscure Wainscot	Leucania obsoleta	3		1	1	4
Olive	Ipimorpha subtusa	2			1	3
				17		
Orange Footman	Eilema sororcula	4		12	23	35
Orange Sallow	Tiliacea citrago	1			1	2

Pale Prinoin	Pale Mottled Willow	Caradrina clavipalpis	11		1		12
Pale Tussock	Pale Pinion	Lithophane socia			1	1	2
Pea Moth         Cydia nigricana         I         1         1         1         1         1         3         4           Peacot Moth         Macaria notata         11         ————————————————————————————————————	Pale Prominent	Pterostoma palpina	7	1	3	1	12
Peacok Moth	Pale Tussock	Calliteara pudibunda	8		1	13	22
Peacock Moth	Pea Moth	Cydia nigricana				1	1
Pebble Hook-tip	Peach Blossom	Thyatira batis	1			3	4
Pebble Prominent	Peacock Moth	Macaria notata	11				11
Pebble Prominent	Pebble Hook-tip	Drepana falcataria	7		2	4	13
Pine Beauty         Panolis flammea         1         1         2           Pine Carpet         Pennithera firmato         4         4         4           Pine Leaf-mining Moth         Sphinx pinastri (Hyloicus pinastri)         2         1         1         1           Pine Leaf-mining Moth         Clovigesta purdeyi         1         1         1         1           Pinich-barred Sallow         Xanthia tagata         12         2         1         1           Plain Wave         Idaea straminata         11         1         1         2           Poplar Grey         Subocronicto megacephala         4         3         5         12           Poplar Hawk-moth         Laothoe populi         27         9         4         4           Poplar Hawk-moth         Laothoe populi         27         9         4         4           Poplar Hawk-moth         Subocronicto megacephala         4         3         5         12           Poplar Hawk-moth         Laothoe populi         27         9         4         4           Poplar Hawk-moth         Subocronicto megacephala         4         3         5         12           Poplar Hawk-moth         Subocronicto megacephala	·		5			1	6
Pine Beauty         Panolis flammed         1         1         2           Pine Carpet         Pennithera firmata         4         1         4           Pine Carpet         Pennithera firmata         4         1         1         4           Pine Leaf-mining Moth         Clavigesta purdeyi         1         1         1         1           Pinion-streaked Snout         Schrankia costaestrigalis         2         2         14         1         2         1         1         1         1         1         1         1         1         1         2         1         1         1         1         1         1         2         1         1         1         2         1         1         1         2         1         1         1         1         1         2         1         2         1	Peppered Moth	Biston betularia	20		6	17	43
Pine Carpet         Pennithero firmata         4         4         4           Pine Hawk-moth         Sphinx pinastri (Hyloicus pinastri)         2         1         1         4           Pine Leaf-mining Moth         Clavigesta purdeyi         1         2         1         14         1         2         1         1         1         1         1         1         2         1         14         1         2         1         1         1         1         2         1         1         4         3         5         12         2         5         7         14         4         4         3         5         12         2         5         7         7         9         4		Panolis flammea	1			1	2
Pine Hawk-moth         Sphinx pinastri (Hyloicus pinastri)         2         1         1         4           Pine Leaf-mining Moth         Clavigesta purdeyi         1         2         1         14         1         1         2         1         14         1         2         1         14         1         2         1         1         1         2         1         1         2         1         1         2         1         1         2         2         1         1         2         2         1         1         2         2         1         1         2         2         1         1         2         2         1         1         2         2         1         1         2         2         1         2         2         1         2         2         1         1         3         3         3         3         4         4         3         3 <t< td=""><td>·</td><td></td><td>4</td><td></td><td></td><td></td><td>4</td></t<>	·		4				4
Pine Leaf-mining Moth         Clavigesta purdeyi         1         1         1           Pinion-streaked Snout         Schrankia costaestrigalis         2         2         14           Pinich-barred Sallow         Xanthia togata         112         2         2         14           Plain Wave         Idaea straminata         1         1         1         2         14           Poplar Grey         Subacronicta megacephala         4         3         5         12           Poplar Grey         Subacronicta megacephala         4         3         5         12           Poplar Forn         Subacronicta megacephala         4         3         5         12           Poplar Forn         Subacronicta megacephala         4         3         5         12           Proplar Forn         Canton medical medican medical medican	•		2		1	1	4
Piniton-streaked Snout         Schrankia costaestrigalis         2          2           Pink-barred Sallow         Xanthia togata         12         2         14           Plain Wave         Idaea straminata         1         1         1           Poplar Grey         Subacronicto megacephala         4         3         5         12           Poplar Hawk-moth         Laothoe populi         27         9         4         40           Powdered Quaker         Orthosia gracilis         2         5         5         7           Privet Hawk-moth         Sphinx ligustri         6         6         6           Purple Clay         Diarsia brunnea         8         2         10           Purple Thorn         Selenia tetralunaria         6         6         6           Red Chestnut         Cerostis rubricosa         8         8         8         8           Red Chestnut         Cerostis rubricosa         8         8         8         8           Red Chestnut         Cerostis rubricosa         8         8         8         8           Red Chestnut         Catocala nupta         1         1         4         5           Red-Barred Tortrix <td>Pine Leaf-mining Moth</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td>1</td>	Pine Leaf-mining Moth			1			1
Pink-barred Sallow   Xanthia togata   12   2   14     Plain Wave   Idaea straminata   1   1   2   1     Poplar Grey   Subacronicta megocephala   4   3   5   12     Poplar Hawk-moth   Laothoe populi   27   9   4   40     Powdered Quaker   Orthosia gracilis   27   9   4   40     Purple Clay   Diarsia brunnea   8   2   10     Purple Clay   Diarsia brunnea   8   2   10     Purple Thorn   Selenia tetralunaria   6   6   6     Red Chestnut   Cerastis rubricosa   8   8   8   8     Red Twin-spot Carpet   Xanthorhoe spadicearia   12   2   2   1   15     Red Underwing   Catocala nupta   2   2   1   15     Red Underwing   Catocala nupta   2   2   1   15     Red Jinderwing   Catocala nupta   2   2   1   15     Red-Barred Tortrix   Ditula angustiorana   1   4   5     Red-Barred Tortrix   Ditula angustiorana   1   1   1   1     Red-Ine Quaker   Leptologia lota (Agrochola lota)   9   1   10     Riband Wave   Idaea aversata   92   1   17   15   125     Ringed China-mark   Parapoynx stratiotata   9   2   1   17   15   125     Ringed China-mark   Parapoynx stratiotata   1   2   2   2     Rosy Fortrix   Archips rosana   1   1   1   1     Rosy Rustic   Hydraecia micacea   91   1   1   4   5     Rosy Wave   Scopula emutaria   1   1   4   5     Rosy Wave   Scopula emutaria   1   1   4   5     Rough-winged Conch   Phtheochroa rugosana   1   1   5   4   10     Ruddy Streak   Tachystola acroxantha   1   5   4   10     Ruddy Streak   Tachystola acroxantha   1   5   4   10     Ruddy Streak   Tachystola acroxantha			2				
Plain Wave					2		
Poplar Grey						1	
Poplar Hawk-moth					3		
Powdered Quaker	-						
Privet Hawk-moth   Sphinx ligustri   Sphinx li							
Purple Clay   Diarsia brunnea   8	•						
Purple Thorn   Selenia tetralunaria   6   8   8   8   8   8   8   8   8   8			8				
Red Chestnut         Cerastis rubricosa         8         8           Red Twin-spot Carpet         Xanthorhoe spadicearia         12         2         1         15           Red Underwing         Catocala nupta         2							
Red Twin-spot Carpet         Xanthorhoe spadicearia         12         2         1         15           Red Underwing         Catocala nupta         2					8		
Red Underwing         Catocala nupta         2         2           Red-barred Tortrix         Ditula angustiorana         1         4         5           Reddish Light Arches         Apamea sublustris         1         6         3         9           Red-line Quaker         Chloroclysta siterata         6         3         9           Red-line Quaker         Leptologia lota (Agrochola lota)         9         1         1         10           Riband Wave         Idaea aversata         92         1         17         15         125           Ringed China-mark         Parapoynx stratiotata         2         2         2         2           Rose Tortrix         Archips rosana         1         4         5         1         1         1         1         1         1			12			1	
Red-barred Tortrix         Ditula angustiorana         1         4         5           Reddish Light Arches         Apamea sublustris         1         ————————————————————————————————————		·				-	
Reddish Light Arches         Apamea sublustris         1         1           Red-green Carpet         Chloroclysta siterata         6         3         9           Red-line Quaker         Leptologia lota (Agrochola lota)         9         1         1         10           Riband Wave         Idaea aversata         92         1         17         15         125           Ringed China-mark         Parapoynx stratiotata         2         2         2         2           Rose Tortrix         Archips rosana         1         1         1         1         1           Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Marbled         Elaphria venustula         19         3         25         16         63           Rosy Rustic         Hydraecia mincacea         91         1         2         93           Rosy Rustic         Hydraecia mincacea         91         1         1         1 </td <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>Д</td> <td></td>					1	Д	
Red-green Carpet         Chloroclysta siterata         6         3         9           Red-line Quaker         Leptologia lota (Agrochola lota)         9         1         10           Riband Wave         Idaea aversata         92         1         17         15         125           Ringed China-mark         Parapoynx stratiotata         2         2         2           Rose Tortrix         Archips rosana         1         1         1           Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Marbled         Elaphria venustula         1         3         1         4         5         5         0         1         4         1         5         8         1         1         4         5			1		_		
Red-line Quaker         Leptologia lota (Agrochola lota)         9         1         10           Riband Wave         Idaea aversata         92         1         17         15         125           Ringed China-mark         Parapoynx stratiotata         2         2         2           Rose Tortrix         Archips rosana         1         1         1           Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Marbled         Elaphria venustula         1         2         93         3         2         93         3         2         93         3         2         93         3         3         1         1         4         5         3         3         4         1         4         5         7         93         3         3 <t< td=""><td></td><td>'</td><td></td><td></td><td>6</td><td>3</td><td></td></t<>		'			6	3	
Riband Wave         Idaea aversata         92         1         17         15         125           Ringed China-mark         Parapoynx stratiotata         2         2           Rose Tortrix         Archips rosana         1         1           Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Marbled         Elaphria venustula         1         3         1         4         5         5         8         1         1         4         5         5         8         1         4         5         5         1         1         4         5         1         1         4		,	9			-	
Ringed China-mark         Parapoynx stratiotata         2         2           Rose Tortrix         Archips rosana         1         1           Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Marbled         Elaphria venustula         1         4         5         5         3         4         4         5         5         8         4         1         4         5         5         4         1         4         5         5         4         1         4         5         5         4         1         4         5         8         1         4         4         5         8         1         4         1			92	1	17	-	
Rose Tortrix         Archips rosana         1         1           Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Marbled         Elaphria venustula         1         1         1         1           Rosy Rustic         Hydraecia micacea         91         2         93           Rosy Wave         Scopula emutaria         1         4         5           Rosy-striped Knot-horn / Rhubarb         1         4         5           and Custard         Oncocera semirubella         1         4         5           Rough-winged Conch         Phtheochroa rugosana         1         3         4           Round-winged Muslin         Thumatha senex         1         3         4           Ruby Tiger         Phragmatobia fuliginosa         4         6         10           Ruddy Streak         Tachystola acroxantha         1         5         4         10           Rufous Minor         Oligia versicolor         16         16         16           Rush Veneer         Nomophila noctuella         2         1         72         75           Rustic Shoulder-knot         Apamea sordens         5         1			32			13	
Rosy Footman         Miltochrista miniata         19         3         25         16         63           Rosy Marbled         Elaphria venustula         1         1         1           Rosy Rustic         Hydraecia micacea         91         2         93           Rosy Wave         Scopula emutaria         1         4         1           Rosy-striped Knot-horn / Rhubarb and Custard         Oncocera semirubella         1         4         5           Rough-winged Conch         Phtheochroa rugosana         1         3         4           Round-winged Muslin         Thumatha senex         1         1         1           Ruby Tiger         Phragmatobia fuliginosa         4         6         10           Ruddy Streak         Tachystola acroxantha         1         5         4         10           Rush Veneer         Nomophila noctuella         2         1         72         75 <td>_</td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td>	_					1	
Rosy Marbled Elaphria venustula 91 1 2 93 Rosy Rustic Hydraecia micacea 91 2 93 Rosy Wave Scopula emutaria 1 1 1 Rosy-striped Knot-horn / Rhubarb and Custard Oncocera semirubella 1 3 4 5 Rough-winged Conch Phtheochroa rugosana 1 3 4 Round-winged Muslin Thumatha senex 1 1 5 4 10 Ruby Tiger Phragmatobia fuliginosa 4 6 10 Ruddy Streak Tachystola acroxantha 1 5 4 10 Rufous Minor Oligia versicolor 16 16 Rush Veneer Nomophila noctuella 2 1 72 75 Rustic Shoulder-knot Apamea sordens 5 1 6 Rusty-dot Pearl Udea ferrugalis 5 3 8 Sallow Cirrhia icteritia 27 10 10 47 Sallow Kitten Furcula furcula 1 5 Saltern Ear Amphipoea fucosa 4 4 4 4			19	3	25		
Rosy RusticHydraecia micacea91293Rosy WaveScopula emutaria111Rosy-striped Knot-horn / Rhubarb and CustardOncocera semirubella145Rough-winged ConchPhtheochroa rugosana134Round-winged MuslinThumatha senex111Ruby TigerPhragmatobia fuliginosa4610Ruddy StreakTachystola acroxantha15410Rufous MinorOligia versicolor161616Rush VeneerNomophila noctuella217275Rustic Shoulder-knotApamea sordens516Rusty-dot PearlUdea ferrugalis538SallowCirrhia icteritia27101047Sallow KittenFurcula furcula1114Saltern EarAmphipoea fucosa4444	•		13		23		
Rosy WaveScopula emutaria11Rosy-striped Knot-horn / Rhubarb and CustardOncocera semirubella145Rough-winged ConchPhtheochroa rugosana134Round-winged MuslinThumatha senex111Ruby TigerPhragmatobia fuliginosa4610Ruddy StreakTachystola acroxantha15410Rufous MinorOligia versicolor161616Rush VeneerNomophila noctuella217275Rustic Shoulder-knotApamea sordens516Rusty-dot PearlUdea ferrugalis538SallowCirrhia icteritia27101047Sallow KittenFurcula furcula111Saltern EarAmphipoea fucosa444		•	91				
Rosy-striped Knot-horn / Rhubarb and Custard  Rough-winged Conch  Rough-winged Muslin  Ruby Tiger  Ruddy Streak  Tachystola acroxantha  Rufous Minor  Rush Veneer  Rustic Shoulder-knot  Rusty-dot Pearl  Sallow  Cirrhia icteritia  Saltern Ear  Amphipoea fucosa  Phtheochroa rugosana  1  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  5  4  6  6  7  7  7  7  7  7  7  7  7  7  7	•	•				2	
and Custard Oncocera semirubella 1 4 5 Rough-winged Conch Phtheochroa rugosana 1 3 4 Round-winged Muslin Thumatha senex 1 5 5 4 10 Ruby Tiger Phragmatobia fuliginosa 4 6 10 Ruddy Streak Tachystola acroxantha 1 5 4 10 Rufous Minor Oligia versicolor 16 16 Rush Veneer Nomophila noctuella 2 1 72 75 Rustic Shoulder-knot Apamea sordens 5 1 6 Rusty-dot Pearl Udea ferrugalis 5 3 8 Sallow Cirrhia icteritia 27 10 10 47 Sallow Kitten Furcula furcula 1 1 Saltern Ear Amphipoea fucosa 4 4		Scopula cinatana					
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Rufous Minor         Oligia versicolor         16         16           Rush Veneer         Nomophila noctuella         2         1         72         75           Rustic Shoulder-knot         Apamea sordens         5         1         6           Rusty-dot Pearl         Udea ferrugalis         5         3         8           Sallow         Cirrhia icteritia         27         10         10         47           Sallow Kitten         Furcula furcula         1         1         1           Saltern Ear         Amphipoea fucosa         4         4         4					5		
Rush Veneer         Nomophila noctuella         2         1         72         75           Rustic Shoulder-knot         Apamea sordens         5         1         6           Rusty-dot Pearl         Udea ferrugalis         5         3         8           Sallow         Cirrhia icteritia         27         10         10         47           Sallow Kitten         Furcula furcula         1         1         1           Saltern Ear         Amphipoea fucosa         4         4         4	-	,					
Rustic Shoulder-knot         Apamea sordens         5         1         6           Rusty-dot Pearl         Udea ferrugalis         5         3         8           Sallow         Cirrhia icteritia         27         10         10         47           Sallow Kitten         Furcula furcula         1         1         1           Saltern Ear         Amphipoea fucosa         4         4         4		•			1	72	
Rusty-dot PearlUdea ferrugalis538SallowCirrhia icteritia27101047Sallow KittenFurcula furcula111Saltern EarAmphipoea fucosa444		,			_		
Sallow         Cirrhia icteritia         27         10         10         47           Sallow Kitten         Furcula furcula         1         1         1           Saltern Ear         Amphipoea fucosa         4         4         4		,			5	_	
Sallow KittenFurcula furcula11Saltern EarAmphipoea fucosa44	-		27			_	
Saltern Ear Amphipoea fucosa 4 4					10	10	
		· ·					
		, , ,	7			2	3

Satellite	Eupsilia transversa	4		1		5
Satin Beauty	Deileptenia ribeata	3				3
Satin Wave	Idaea subsericeata	13				13
Scalloped Hazel	Odontopera bidentata	1		1		2
Scalloped Hook-tip	Falcaria lacertinaria	3				3
Scalloped Oak	Crocallis elinguaria	20				20
Scarce Bordered Straw	Helicoverpa armigera			1		1
Scarce Footman	Eilema complana	103			9	112
Scarce Silver-lines	Bena bicolorana	2			1	3
Scarce Umber	Agriopis aurantiaria	3		1		4
Scorched Wing	Plagodis dolabraria	8		2	9	19
September Thorn	Ennomos erosaria	6		1		7
Seraphim	Lobophora halterata	1			2	3
Setaceous Hebrew Character	Xestia c-nigrum	119	4	15	50	188
Shaded Broad-bar	Scotopteryx chenopodiata	1				1
Sharp-angled Carpet	Euphyia unangulata	1				1
Sharp-angled Peacock	Macaria alternata	4			2	6
Short-cloaked Moth	Nola cucullatella	4				4
Shoulder-striped Wainscot	Leucania comma	19				19
Shuttle-shaped Dart	Agrotis puta	178	2	9	38	227
Silky Wainscot	Chilodes maritima	1				1
Silver Y	Autographa gamma	37		17	8	62
Silver-ground Carpet	Xanthorhoe montanata	1				1
Single-dotted Wave	Idaea dimidiata	26			1	27
Six-spot Burnet	Zygaena filipendulae	11	1		415	427
Six-striped Rustic	Xestia sexstrigata	35		1	2	38
Slender Brindle	Apamea scolopacina			1		1
Small Angle Shades	Euplexia lucipara	2			3	5
Small Blood-vein	Scopula imitaria	4				4
Small China-mark	Cataclysta lemnata			1	1	2
Small Clouded Brindle	Apamea unanimis				1	1
Small Dotted Buff	Photedes minima	27				27
Small Elephant Hawk-moth	Deilephila porcellus				1	1
Small Emerald	Hemistola chrysoprasaria	3				3
Small Fan-foot	Herminia grisealis	4			1	5
Small Fan-footed Wave	Idaea biselata	49		2	5	56
Small Magpie	Anania hortulata	1		3	2	6
Small Phoenix	Ecliptopera silaceata	1		4	7	12
Small Quaker	Orthosia cruda	2		20	33	55
Small Seraphim	Pterapherapteryx sexalata	2		1	1	4
Small Square-spot	Diarsia rubi	52		5	22	79
Small Wainscot	Denticucullus pygmina	9				9
Small Yellow Wave	Hydrelia flammeolaria	3				3
Smoky Wainscot	Mythimna impura	169	1		5	175
Snout	Hypena proboscidalis	12	1	13	5	31
Sombre Brocade	Dichonioxa tenebrosa				2	2
Spectacle	Abrostola tripartita	6	1	8	9	24
Spruce Carpet	Thera britannica	4		5	1	10
Square-spot Rustic	Xestia xanthographa	424	1	14	11	450
Straw Dot	Rivula sericealis	40		13	12	65

Straw Underwing	Thalpophila matura	4			1	5
Striped Wainscot	Mythimna pudorina	3				3
Svensson's Copper Underwing	Amphipyra berbera	5				5
Swallow Prominent	Pheosia tremula	8		6	1	15
Swallow-tailed Moth	Ourapteryx sambucaria	13				13
Sycamore	Acronicta aceris	4				4
Tawny Marbled Minor	Oligia latruncula	19				19
Tawny Pinion	Lithophane semibrunnea				1	1
Tawny Speckled Pug	Eupithecia icterata	4		1		5
Tawny-barred Angle	Macaria liturata	5			7	12
Thistle Conch	Aethes cnicana	1				1
Thistle Ermine	Myelois circumvoluta				1	1
Treble Brown Spot	Idaea trigeminata	3		1		4
Treble Lines	Charanyca trigrammica	62		45	28	135
Treble-bar	Aplocera plagiata				2	2
Tree-lichen Beauty	Cryphia algae			1		1
Triangle-marked Roller	Ancylis achatana	2		-		2
Triple-spotted Clay	Xestia ditrapezium	1				1
True Lover's Knot	Lycophotia porphyrea	9		1	4	14
Turnip Moth	Agrotis segetum	45	2	1	4	52
Twin-spotted Quaker	Anorthoa munda	7.5		8	8	16
Uncertain/Rustic agg.	Hoplodrina octogenaria/blanda	308	3	17	23	351
Vapourer	Orgyia antiqua	1	3	1/	23	1
Variegated Golden Tortrix	Archips xylosteana			4		4
Vestal	Rhodometra sacraria	1	1	4	2	4
Vine's Rustic	Hoplodrina ambigua	199	2	23	26	250
V-pug	Chloroclystis v-ata	199		23	1	1
Water Veneer	Acentria ephemerella			3	1	4
White Ermine	Spilosoma lubricipeda	14		7	9	30
White Plume	· '	2		2	3	7
White-line Dart	Pterophorus pentadactyla  Euxoa tritici	2			3	
White-point		2		7	10	<u>2</u> 17
White-point White-shouldered House-moth	Mythimna albipuncta Endrosis sarcitrella			2	10	2
		3				3
White-shouldered Marble	Apotomis turbidana	3			4	
White-spotted Pug	Eupithecia tripunctaria	F2	-	25	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Willow Beauty	Peribatodes rhomboidaria	52	7	35	16	110
Willow Ermine	Yponomeuta rorrella				2	2
Winter Moth	Operophtera brumata	9			4	9
Yellow Belle	Aspitates ochrearia	2		4	1	3
Yellow Horned	Achlya flavicornis			1		1
Yellow Oak Button	Aleimma loeflingiana	4				4
Yellow Shell	Camptogramma bilineata	3			2	5
Yellow-line Quaker	Leptologia macilenta (Agrochola macilenta)	15		1		16
				1		
Yellow-tail	Euproctis similis	7			1	7 1
	Acleris ferrugana/notana		4	_	1	
	Acleris laterana/comariana		1	7	2	10
	Acleris sparsana			2		2
	Acrobasis advenella			1		1
	Acrobasis suavella				1	1
	Aethes smeathmanniana				1	1

Agapeta hamana		1	1		2
Agapeta zoegana		1			1
Agonopterix arenella			1		1
Agonopterix heracliana/ciliella			1		1
Agriphila geniculea			2	2	4
Agriphila latistria				1	1
Agriphila selasella				1	1
Agriphila straminella	1	1	2	5	9
Agriphila tristella	1	2		16	19
Ancylosis oblitella				1	1
Argyresthia brockeella	1		1		2
Argyresthia goedartella			2	1	3
Argyresthia spinosella				1	1
Aristotelia ericinella		1			1
Bactra lancealana				1	1
Bactra lancealana/lacteana ag.			1		1
Batrachedra praeangusta				1	1
Blastobasis adustella			12	49	61
Blastobasis lacticolella			4	3	7
Brachmia blandella				1	1
Bryotropha domestica				1	1
Bryotropha terrella			1		1
Caloptilia alchimiella/robustella				2	2
Caloptilia robustella	1				1
Carcina quercana	1	1		6	8
Catoptria falsella				1	1
Catoptria pinella				1	1
Celypha lacunana		2	4	8	14
Chrysoteuchia culmella	1	5	49	31	86
Clepsis consimilana			1	2	3
Cnephasia agg.		1		3	4
Cochylis molliculana			1	3	4
Coleophora limoniella				1	1
Coleophora sp.		1		27	28
Coptotriche marginea				1	1
Crambus pascuella	1	1			2
Crambus perlella			1		1
Cryptoblabes bistriga				2	2
Cydia amplana			2	1	3
Cydia splendana	1		8	10	19
Cydia ulicetana				2	2
Dichomeris alacella				2	2
Dioryctria abietella			1		1
Dioryctria simplicella	1				1
Diurnea fagella			1	2	3
Dyseriocrania subpurpurella				1	1
Endotricha flammealis		1		1	2
Ephestia sp.				1	1
Epinotia bilunana			1		1
Epinotia nisella				1	1

E	pinotia ramella			3		3
E	pinotia tetraquetrana				1	1
E	ucosma campoliliana				1	1
E	ucosma cana			2	4	6
E	ucosma obumbratana				1	1
E	Eudonia angustea		1	7		8
E	Eudonia delunella	1		3	6	10
E	Eudonia lacustrata			2	8	10
E	Eudonia mercurella			3	3	6
E	Euzophera pinguis			1	4	5
E-	Evergestis limbata				1	1
G	Glyphipterix thrasonella			1	1	2
G	Gypsonoma aceriana				1	1
G	Gypsonoma minutana				1	1
Н	Homoeosoma sinuella			1		1
Lo	oxostege sticticalis			1		1
Lo	ozotaenia forsterana			1		1
l N	Metzneria lappella				1	1
	Mompha epilobiella				2	2
N	Notocelia rosaecolana				1	1
P	Palpita vitrealis				1	1
P	Pammene fasciana				2	2
P	Pediasia contaminella			1		1
P	Platyedra subcinerea			1	1	2
P	Pseudargyrotoza conwagana			1		1
P	Pyrausta purpuralis			1		1
So	Scoparia basistrigalis				1	1
Si	Scrobipalpa acuminatella		1			1
So	Scrobipalpa costella				2	2
S	Synaphe punctalis			3	3	6
T	Teleiodes luculella			1	3	4
T	Tinea trinotella			2		2
U	Jdea fulvalis				2	2
U	Jdea olivalis			1		1
U	Jdea prunalis				1	1
Y,	ʻpsolopha sequella			1		1
Y,	ʻpsolopha ustella				1	1
Z	eiraphera isertana			1		1
*Total count includes a few species	Annual TOTAL of Individual moths	7864	240	1713	2819	12636

<sup>\*</sup>Total count includes a few species that are difficult to identify without dissection, which have been recorded as aggregrate (agg.) species.

Micro moths with Common Names are highlighted in grey. New for Site (NFS) species are highlighted in yellow.

## THE MOTHS OF UPTON COUNTRY PARK – A MONTHLY ROUND UP FOR 2022

## **Sally Grant**



Some of the "mothing" volunteers in action. © Martin Adams

#### **JANUARY**

January was mostly cold and damp, with a few mild sunny days. We set both the actinic and MV traps in the walled garden on 28<sup>th</sup>/29<sup>th</sup> January 2022. It was 10°C, overcast with a light, westerly breeze, and 90% humidity. We trapped no moths, but did see three Clover Weevils (*Sitoria*), and UCP staff spotted an Angle Shades (*Phlogophora meticulosa*) caterpillar in the car park on 21<sup>st</sup> January 2022.

The shrubs in the walled garden had been pruned hard back during winter. It will be interesting to see whether this has any impact on the number of adult moths this year and next.

#### **FEBRUARY**

There were some very warm and sunny days during February, but we also experienced storm conditions with high winds, which left little opportunity for a successful mothing session.

## **MARCH**

Both traps were set on three dates during March 2022.

Common Quaker (*Orthosia cerasii*) was most prevalent with a total of 68 seen. We also recorded an Oak Nycteoline (*Nycteola revayana*), seen on only one occasion in 2021; 1x Brindled Beauty (*Lycia hirtaria*) and 1x Powdered Quaker (*Orthosia gracilis*), 2 of each seen in 2021; 4x Double-striped Pug (*Gymnoscelis rufifasciatal*) 1x Pale Pinion (*Lithophane socia*), and 2x *Diurnia fagella*.



March Moth (Alsophila aescularia)



Oak Nycteoline (Nycteola revayana)

At this point in 2021, we had also seen 1x Yellow Horned moth (*Achlya flavicornis*), the only one of this species all year and not recorded again in 2022; and a Red-green Carpet (*Chloroclysta siterata*), whereas Clouded Drab (*Orthosia incerta*) was not seen until April in 2021.

New for site (NFS) were two micros: *Acleris ferrugana/notana* ag. and *Ypsolopha ustella* (Variable Smudge) with a wing span of 15-20mm, which feeds on several common trees including Oak



Acleris ferrugana/notana (Quercus).



Ypsolopha ustella

## Total for March: 16 species, 142 individuals, 3 dates

Scientific Name	Common Name	Individuals
Brindled Beauty	Lycia hirtaria	1
Chestnut	Conistra vaccinii	3
Clouded Drab	Orthosia incerta	7
Common Quaker	Orthosia cerasi	68
Double-striped Pug	Gymnoscelis rufifasciata	5
Hebrew Character	Orthosia gothica	16
March Moth	Alsophila aescularia	7
Oak Beauty	Biston strataria	3
Oak Nycteoline	Nycteola revayana	1
Pale Pinion	Lithophane socia	1
Powdered Quaker	Orthosia gracilis	1
Small Quaker	Orthosia cruda	19
Twin-spotted Quaker	Anorthoa munda	6
	Acleris ferrugana/notana*	1
	Diurnea fagella	2
	Ypsolopha ustella*	1
16 Species		142

## **Table 1 Moths trapped during March 2022 (\*New for Site)**

#### **APRIL**

1<sup>st</sup> April 2022 brought no surprises with ether the Actinic or MV: Common Quaker 5, Small Quaker 4, Powdered Quaker 1, Hebrew Character (*Orthosia gothica*) 6, Clouded Drab 4. That is 5 species and 20 individuals.

On 7<sup>th</sup> April 2022 two MV traps were used rather than the usual one MV and one actinic. One was placed just outside the summer house in the south-east corner, and the other approx. 20 metres away, along the southerly path. It was mostly dry overnight with a stiff breeze. 8th April 2022 was initially wet and 6°C. The traps were both moved into the summer house for checking.

We recorded one each of Brindled Beauty (*Lycia hirtaria*), Early Grey (*Xylocampa areola*), March Moth (*Alsophila aescularia*), Oak Beauty (*Biston strataria*), Powdered Quaker (*Orthosia gracilis*) and micro Dyseriocrania subpurpurella. We had 2x Clouded Drab (*Orthosia incerta*), 2x Twin-spot Quaker (*Anorthoa munda*), 3x Frosted Green (*Polyploca ridens*), 4x Hebrew Character (*Orthosia gothica*), 7x Small Quaker, and 31 Common Quaker. A total of 12 species and 55 individuals.



Early Tooth-striped (*Trichopteryx carpinata*)



Chocolate Tip (Clostera curtula)



Seraphim (Lobophora halterata)

The night of 20<sup>th</sup> April 2022 was mild and dry with a temperature of 6°C at 8:00am on 21st. Notable was a possible "NFS" of an Early Tooth-striped (*Trichopteryx carpinata*) and, after long debate, a Tawny Pinion (*Lithophane semibrunnea*).

Also recorded were 2x Nut-tree Tussock (*Colocasia coryli*). Despite the abundance of the larvae's food plants of beech, birch and hazel, only one of the latter species was recorded in 2021, and that not until August, whereas a total of 10 were recorded in 2022.







Tawny Pinion photographs for identification purposes

On 24<sup>th</sup> April 2022 the first Dark Sword-grass (*Agrotis ipsilon*) was trapped. Only two were seen in 2021, and not until July and August. A total of 5 were recorded for 2022 in April, August and November.

One Seraphim (*Lobophora halterata*) was also recorded. This species has only been officially recorded twice before at UCP; in 1989 and 1990. We also recorded a single Chocolate Tip (*Clostera curtulal*), last recorded in 1970.

## Total for April: 22 species, 160 individuals, 4 dates

		Sum of
Common Name	Scientific Name	Adult
Brindled Beauty	Lycia hirtaria	6
Chocolate-tip	Clostera curtula	1
Clouded Drab	Orthosia incerta	9
Common Quaker	Orthosia cerasi	76
Dark Sword-grass	Agrotis ipsilon	1
Double-striped Pug	Gymnoscelis rufifasciata	1
Early Grey	Xylocampa areola	2
Early Tooth-striped	Trichopteryx carpinata*	1
Frosted Green	Polyploca ridens	13
Hebrew Character	Orthosia gothica	19
Lunar Marbled Brown	Drymonia ruficornis	2
March Moth	Alsophila aescularia	1
Muslin Moth	Diaphora mendica	1
Nut-tree Tussock	Colocasia coryli	2
Oak Beauty	Biston strataria	1
Pine Beauty	Panolis flammea	1
Powdered Quaker	Orthosia gracilis	4
Seraphim	Lobophora halterata	1
Small Quaker	Orthosia cruda	14
Tawny Pinion	Lithophane semibrunnea*	1
Twin-spotted Quaker	Anorthoa munda	2
	Dyseriocrania subpurpurella	1
22 Species		160

Table 2 Moths trapped during April 2022 (\*New for Site)

## MAY

Seen for the first time this year were Bright-line Brown-eye (*Lacanobia oleracea*), a month earlier than last year. A total of 11 were seen in 2021; Brimstone (*Opisthograptis luteolata*); L-album Wainscot (*Mythimna I-album*); Marbled Rustic (*Caradrina Morpheus*); Marbled White Spot (*Deltote pygarga*); Narrow-winged Pug (*Eupithecia nanata*) with only 2 seen last year; Pale Tussock (*Calliteara pudibunda*) only 1 seen in 2021, but apparently more abundant in 1990; Peppered Moth (*Biston betularia*); Spectacle (*Abrostola tripartite*); 9x Treble Lines (*Charanyca trigrammica*); Coronet (*Craniophora ligustri*), and White Ermine (*Spilosoma lubricipeda*).

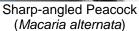
It was good to record the first Poplar Hawk-moth for 2022. Although a total of 13 were recorded during 2022, against 9 in 2021, this still falls short of the 22 recorded in 1990.

A Least Black Arches (Nola confusalis) was formally recorded for the first time since 1990.

On 26<sup>th</sup> May 2022 first for the year included "NFS": Small Elephant Hawkmoth (*Deilephila porcellus*), and a Sharp-angled Peacock (*Macaria alternata*) was recorded for the first time since 2007.

"NFS" were 2x Alder Moth (*Acronicta alni*), 1x Great Prominent (*Peridea anceps*). 1x Privet Hawkmoth (*Sphinx ligustri*), and micro *Notocelia rosaecolana*. Although not uncommon in the south, the Great Prominent is not usually seen outside of Oak woodland. As only one was seen all year, it would be interesting to see how many may be present around the Oaks at UCP.







Alder Moth (Acronicta alni)



Notocelia rosaecolana

Elsewhere in the Holes Bay area: 30x Burnet Companion (*Euclidia glyphica*) were seen on a single day, leading to a total of 47 for 2022; along with other day-flying moths: Cinnabar (*Tyria jacobaeae*), and Mother Shipton (*Euclidia mi*).

Formally recorded "NFS" were: 2x Yellow Shell (*Camptogramma bilineata*), and micros: 1x Carnation Tortrix (*Cacoecimorpha* pronubana), and 1x Pea Moth (*Cydia* nigricana).



Privet Hawkmoth (Sphinx ligustri)



Cinnabar (*Tyria jacobaeae*)
© Martin Adams



Mother Shipton (*Euclidia mi*) © Sally Grant

## Total for May: 45 species, 82 individuals, 2 dates

Common Name	Scientific Name	Individuals
Alder Moth	Acronicta alni	2
Great Prominent	Peridea anceps	1
Privet Hawk-moth	Sphinx ligustri	1
Small Elephant Hawk-moth	Deilephila porcellus	1
	Notocelia rosaecolana*	1
5 Species		6

Table 3 Species New for Site – May 2022 (\* micro)

#### **JUNE**

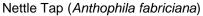
June saw the highest number of species ever formally recorded during one month, as well as in one session.

On 2<sup>nd</sup> June 2022 **53 species and 146 individuals** (macros and micros) were recorded. These included 9x Brussels Lace (*Cleorodes lichenaria*), Common White Wave (*Cabera pusaria*) not recorded since 1990, one Lime-speck Pug (*Eupithecia centaureata*) only seen once before in 2008, Obscure Wainscot (*Leucania obsolete*) not recorded since 2008, Rustic Shoulder-knot (*Apamea sordens*) not recorded since 1990, plus four Scorched Wing and two Small Phoenix (*Ecliptopera silaceata*) both first records for the year.

Not recorded in recent years: May Highflyer (*Hydriomena impluviata*) forewing 13-16mm, the larvae feed on Alder, which thrives in the damp conditions found at UCP. "NFS" were: Rosy Marbled (*Elaphria venustula*) forewing 10-11mm, the larvae feed on Tormentil and Creeping Cinquefoil; and micro *Caloptilia alchimiella/robustella*. These two micro species are difficult to distinguish. They each mine the leaves of Oak leaving the same tell-tale signs and both have a wingspan of 10-13mm.

On 3<sup>rd</sup> June the first of three (for 2022) Brown Silver-line (*Petrophora chlorosata*) was recorded in the area of Grove Pond/Dead Man's Ditch.







Caloptilia alchimiella/robustella



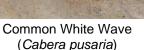
Rosy Marbled (Elaphria venustula)

8<sup>th</sup> June **24 species 53 individuals** with just one "NFS": a Garden Pebble (*Evergestis forficalis*). This moth feeds largely on cultivated brassicas (cabbage, sprouts and cauliflower) so probably a pest in private gardens and agriculturally. However, they do also feed on wild cabbage (*Brassica oleracea*), which may well be present in the Holes Bay area. It has a wingspan of 25-28mm and flies from May-June through to September. This was the only individual seen in 2022.

First appearance of the year for 4x Ingrailed Clay (Diarsia mendica), and a single Large Yellow Underwing (Noctua pronuba) the first of 73; one of our top twenty most prevalent moths for 2022.

The only Bird's Wing (*Dypterygia scabriuscula*) for 2022 was recorded on this day. Only one being recorded in 2021.







Tawny-barred Angle (*Macaria liturata*)



Obscure Wainscot (Leucania obsolete)

On 13<sup>th</sup> June a "NFS" Nettle Tap (*Anthophila fabriciana*) was spotted in a hedge line in UCP, and another Yellow Shell (*Camptogramma bilineata*) was spotted in the Twin Sails area of Holes Bay.

16<sup>th</sup> June **50 species 109 individuals** were recorded with Small Clouded Brindle (*Apamea unanimis*) and a Tawny-barred Angle (*Macaria liturata*) being "NFS". The Brindle is associated with wetland, feeding on sedge grass (*Carex sp.*), but only one was seen during 2022. It has a forewing of 15-17mm. The Tawny-barred is a similar size and feeds on a variety of conifers, which are found in the park. A total of 7 were seen during the year.

Other species not seen in recent years were Dusky Brocade (*Apamea remissa*), Grey Arches (*Polia nebulosa*), Buff Ermine (*Spilosoma lutea*) and micro Epestia sp.

23<sup>rd</sup> June **40 species 70 individuals** were seen with following "NFS": Sloe Pug (*Pasiphila chloerata*), V-Pug (*Chloroclystis v-ata*), and a micro, *Metzneria lappella*. It is surprising that the V-Pug (forewing 8-11mm) has not been recorded previously as the larvae feed on many plants that exist at UCP including bramble (*Rubus fruticosus*, Dog Rose (*Rosa cana*) and Yarrow (*Achillea millefolium*). *Metzneria lappella* has a wingspan of 16-20mm and feeds on Burdock. It has the common name of Burdock Neb for this reason.

Also of note was a Grey Pug (*Eupithecia subfuscata*) previously recorded in 1990 (1) and 2008 (2); Purple Clay (*Diarsia brunnea*) not recorded since 1984 (8) and a Small Fan-foot (*Herminia grisealis*) previously recorded in 1990 (2) and 2008 (2).

Total for June: 103 species, 378 individuals, 4 dates

Common Name	Scientific Name	Individuals
Garden Pebble	Evergestis forficalis*	1
Nettle-tap	Anthophila fabriciana*	1
Rosy Marbled	Elaphria venustula	1
Sloe Pug	Pasiphila chloerata	1
Small Clouded Brindle	Apamea unanimis	1
Tawny-barred Angle	Macaria liturata	1
V-pug	Chloroclystis v-ata	1
	Caloptilia alchimiella/robustella*	1
	Metzneria lappella*	1
9 Species		9

Table 4 Species New for Site – June 2022 (\* micro)

#### **JULY**

The hot, dry weather continued into July, resulting in further local records being broken.

1st July 2022 **27 species, 41 individuals** including 2x Four-spotted Footman (*Lithosia quadra*), which were "NFS". This moth is described in Dorset Moths as "rare or very scarce", but elsewhere as a "widespread resident in SW England", so it is difficult to say whether the 12 recorded at UCP during 2022 were resident or migrants. It is an attractive moth, which is fairly easy to identify. The males have a wingspan of 18-22mm, the females 20-26mm. The larvae feed on lichen growing on various trees including Oak.



Peach Blossom (Thyatira batis)



Common Plume (Emmelina monodactyla)



Common Lutestring (Ochropacha duplaris)

Also of note were the first Elephant Hawk-moth (*Deilephila elpenor*) of the year, Small Angle Shades (*Euplexia lucipara*) previously recorded in 1990 (1) and 2007 (2), and a Kent Black Arches (*Meganola albula*) previously seen in 2007 (1).



Kent Black Arches (Meganola albula)



Small Angle Shades (Euplexia lucipara)



European Corn-borer (Ostrinia nubilalis)

6<sup>th</sup> July 2022 **65 species, 147 individuals**. Apart from a Striped Wainscot (*Mythimna pudorina*) previously recorded in 1990 (1) and 2007 (2), a total of 13 "NFS" species are listed below, 11 of which are micro moths. This was the only occasion that these moths were seen in 2022.

Common Name	Scientific Name	Individuals
Common Lutestring	Ochropacha duplaris	1
Common Plume	Emmelina monodactyla*	1
Dot Moth	Melanchra persicariae	2
European Corn-borer	Ostrinia nubilalis*	3
Hollyhock Seed Moth	Pexicopia malvella*	2
Thistle Ermine	Myelois circumvoluta*	1
	Argyresthia spinosella*	1
	Coptotriche marginea*	1
	Epinotia nisella*	1
	Eucosma campoliliana*	1

13 Species		19
	Pammene fasciana*	2
	Scoparia basistrigalis*	1
	Mompha epilobiella*	2

Table 5 Species New for Site - 6th July 2022 (\* micro)

15<sup>th</sup> July 2022 **55 species, 123 individuals** recorded in the moth traps, plus 232 Six-Spot Burnet (*Zygaena filipendulae*) in two areas of the Holes Bay Road, NE open space. A total of 415 were recorded during 2022.

The only moths "NFS" were micros: *Coleophora limoniella*. With a wingspan of around 10mm, this moth feeds on Common Sea Lavender (*Limonium vulgare*) found in saltmarsh and present in Holes Bay. *Yponomeuta evonymella* or Bird-cherry Ermine is the easiest of the micro-Ermines to identify due to the five clear rows of black dots on its forewing.

Also seen was a single Miller (*Acronicta leporine*) only ever seen in small numbers around UCP. A relative newcomer to the UK, micro *Cochylis molliculana* now re-named *Neococylis molliculana*, was first recorded at Portland in 1993. First recorded at UCP in 2021, two were counted this year.

On the 17th July a Privet Hawk-moth (Sphinx ligustri) caterpillar was spotted in the gardens.

20<sup>th</sup> July 2022 **92 species, 269 individuals** the highest number of species ever recorded at UCP in one session, as well as the highest number of species (14) formally recorded for the first time.10 being micros, with only the Maple Pug (*Eupithecia inturbata*) seen again in 2022 on 27<sup>th</sup> July.

Common Name	Scientific Name	Individuals
Coxcomb Prominent	Ptilodon capucina	1
Double Lobed	Lateroligia ophiogramma	1
Leek Moth	Acrolepiopsis assectella*	1
Maple Pug	Eupithecia inturbata	2
Rose Tortrix	Archips rosana*	1
Slender Pug	Eupithecia tenuiata	1
	Batrachedra praeangusta*	1
	Brachmia blandella*	1
	Catoptria pinella*	1
	Cryptoblabes bistriga*	2
	Gypsonoma aceriana*	1
	Gypsonoma minutana*	1
	Scrobipalpa costella*	2
	Udea fulvalis*	2
14 Species		18

Table 6 Species New for Site – 20th July 2022 (\*micro)

Also seen on 20th July were five other species, formally recorded for the first time in recent years.

Common Name	Scientific Name	Individuals	Last Seen
Apple Leaf Miner	Lyonetia clerkella*	14	1x2008
Clay	Mythimna ferrago	11	1x2007,2008
Fen Wainscot	Arenostola phragmitidis	1	1x1990
Pebble Prominent	Notodonta ziczac	1	5x1990
Ruby Tiger	Phragmatobia fuliginosa	6	4x1990

Table 7 Species not formally recorded in recent years - 20th July 2022 (\* micro)

27<sup>th</sup> July 2022 **86 species, 261 individuals**. Of these, 47 were single individuals with 10 being "NFS".

Also worthy of note were macros Scarce Silver-lines (*Bena bicolorana*) last recorded in 1990, and White-line Dart (*Euxoa tritici*) one seen in 1977 and in 1990.

Common Name	Scientific Name	Individuals
Cloaked Minor	Mesoligia furuncula	3
Iron Prominent	Notodonta dromedarius	1
Olive	Ipimorpha subtusa	1
Plain Wave	Idaea straminata	1
Saltmarsh Plume	Agdistis bennetii*	3
Willow Ermine	Yponomeuta rorrella*	2
	Acrobasis suavella*	1
	Bryotropha domestica*	1
	Dichomeris alacella*	2
	Udea prunalis*	1
10 Species		16

Table 8 Species New for Site – 27<sup>th</sup> July 2022 (\* micro)

Total for July: 164 species, 841 individuals, 5 dates

## **AUGUST**

11th August 2022 **47 species, 133 individuals**. There were three micros "NFS": *Aethes smeathmanniana*, 12-19mm, the Yarrow Conch named for its food plant Yarrow and Knapweed; *Agriphila selasella*, approx. 26mm, the Pale-streak Grass Veneer feeds on grasses around the edges of Poole Harbour and Holes Bay; *Catoptria falsella*, 18-22mm, the Chequered Grass Veneer, feeds on mosses, particularly *Tortula muralis*, and inhabits sandy areas like that found on nearby Upton Heath.

One macro "NFS" was a White-spotted Pug (*Eupithecia tripunctaria*), 10-12mm, which feeds on Wild Angelica (*Angelica sylvestris*) and other wildflowers found in the area. This Pug is very similar to Grey, Golden-rod and Larch Pug, but identifiable by the white spots on the thorax and both forewing and hindwing.

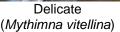
Also recorded were 18x *Blastobasis adustella* and 17x Double-striped Pug (*Gymnoscelis rufifasciata*); the latter being one of our top twenty most prevalent moths for the year.

## 19th August 2022 **36 species, 150 individuals**

One Straw Underwing (*Thalpophila matura*) 17-22mm was recorded. Not seen at UCP since 1990, this moth is commonly found in lowland England and coastal areas of Scotland, it is otherwise classed as rare. Two macros "NFS" were *Cydia ulicetana* 12-16mm, this Grey Gorse Piercer feeds on Gorse, Broom, Greenweeds and Bird's-foot Trefoil; and *Eucosma obumbratana* 14-20mm feeds on Sow-thistle.

38x Lesser Broad-bordered Yellow Underwing (*Noctua janthe*) were recorded across two traps; almost half of the total of 80 for 2022.







Straw Underwing (Thalpophila matura)



(Cydia ulicetana) 'Grey Gorse Piercer'

24th August 2022 54 species, 240 individuals

Two Rosy Rustic (*Hydraecia micacea*) were recorded for the first time in recent years. However, it proved very abundant in 1990 with 78 being recorded. Also, micro *Cochylis atricapitana* was recorded for the first time since 2008(1).

"NFS" were *Agriphila latistria*, White-streaked Grass Veneer, 22-27mm, which inhabits dry heathland and coastal grassland, both habitats found at UCP; *Epinotia tetraquetrana* 12-16mm, which feeds on Alder and Birch; *Evergestis limbata* 23-26mm, is listed as "Nationally Scarce B" by Dorset Moths meaning that it has been recorded in 31-100 ten-kilometre squares in Great Britain, as opposed to "A"... recorded in 16-30 ten-kilometre squares". They conclude that this species has become established in Dorset. Final "NFS", a macro, Delicate (*Mythimna vitellina*) is an immigrant, which is only successful if the weather in the UK suits its needs. Otherwise, they die out until fresh individuals make it to our shores, mate and lay eggs.

Seen elsewhere around the Holes Bay area during August were: Humming-bird Hawk-moth (*Macroglossum stellatarum*), Jersey Tiger (*Euplagia quadripunctaria*), Six-spot Burnet (*Zygaena filipendulae*), and micros: *Agriphila geniculea*, *Agriphila tristella*, *Aplocera plagiata*, *Aspitates ochrearia*, and *Oncocera semirubella*.

Total for August: 86 species, 523 individuals, 3 dates

Scientific Name	Common Name	Individuals
Delicate	Mythimna vitellina	1
White-spotted Pug	Eupithecia tripunctaria	1
	Aethes smeathmanniana*	1
	Agriphila latistria*	1
	Agriphila selasella*	1
	Catoptria falsella*	1
	Cydia ulicetana*	2
	Epinotia tetraquetrana*	1
	Eucosma obumbratana*	1
	Evergestis limbata*	1
10 Species		11

Table 9 Species New for Site - August 2022 (\* micro)

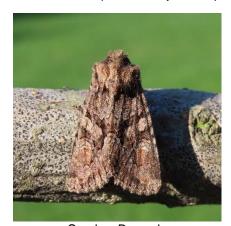
## **SEPTEMBER**

During the late evening of 1<sup>st</sup> September 2022 Nick Woods set up his actinic trap in the SANG Phase 2 area for a few hours. **26 species, 38 individuals** were recorded. Of those, 3 micros were "NFS": *Ancylosis oblitella* 18-22mm, described as "Nationally Scarce B", this species is now

resident in the Thames estuary, but a rare immigrant to Dorset first reported in 1984. The larvae feed on salt-tolerant Goosefoot (*Chenopodium spp.*); *Clepsis spectrana* (Cyclamen Tortrix) that feeds on herbaceous plants found in the walled garden and borders; and *Scythropia crataegella* (Hawthorn Moth) feeding on Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*).







Ancylosis oblitella

Orange Sallow (Tiliacea citrago)

Sombre Brocade (Dichonioxa tenebrosa)

Macros not seen in recent years were: Brown-veined Wainscot (*Archanara dissoluta*), which feeds on Common Reed (*Phragmites australis*); Common Wave (*Cabera exanthemata*), which feeds on *Salix spp.* and Aspen; Single-dotted Wave (*Idaea dimidiate*) found on unimproved grassland feeding on Burnet Saxifrage (*Pimpinella saxifraga*), Cow Parsley (*Anthriscus sylvestris*), and Hedge Bedstraw (*Galium mollugo*). Elsewhere in UCP a larva of the Goat Moth (*Cossus cossus*) was spotted by a member of BCP staff, but the large, well camouflaged adult is yet to be recorded.

16<sup>th</sup> September 2022 **10 species, 27 individuals**. There was a clear sky overnight with frost on the grass in the shade at 8:00am on 17<sup>th</sup>, which may account for the lower numbers compared with 1<sup>st</sup> and 21<sup>st</sup> September.

The only "NFS" were 2x Sombre Brocade (*Dichonioxa tenebrosa*), a migrant which feeds on Holm Oak (*Quercus Ilex*), which is present at UCP.

The majority of species were in single numbers with the exception of 4x Angle Shades and 13x Large Yellow Underwing.

## 21st September 2022 15 species, 65 individuals

Not seen in recent years was a single Orange Sallow (*Tiliacea citrago*) 15-17mm, which feeds on various species of Lime (*Tilia*); abundant at UCP.

Another Sombre Brocade was recorded, along with 9x Sallow (*Cirrhia icteritia*), 10x Lunar Underwing (*Omphaloscelis lunosa*), with both light and dark variations, 25x Large Yellow Underwing, and the last of 5x Copper Underwings seen this year.

Total for September: 42 Species, 130 Individuals, 3 dates

Common Name	Scientific Name	Individuals
Cyclamen Tortrix	Clepsis spectrana*	1
Hawthorn Moth	Scythropia crataegella*	1
Sombre Brocade	Dichonioxa tenebrosa	2
	Ancylosis oblitella*	1
4 Species		5

Table 10 Species New for Site - September 2022 (\* micro)

#### **OCTOBER**

11th October 2022 11 species, 22 individuals

Not recorded since 1990(3) were 2x Blair's Shoulder Knot (Lithophane leautieri). This moth has colonised the UK since the early 1950s and feeds on various species of Cypress.

It may have been late in the year with only 11 species in total, but this was the first sighting in 2022 of Barred Sallow (Tiliacea aurago), Beaded Chestnut (Agrochola lychnidis), Black Rustic (Aporophyla nigra), and Merveille du Jour (Griposia aprilina).

24th October 2022 18 species, 49 individuals

Still seeing "NFS" with Palpita vitrealis 27-31mm, which feeds on Jasmine, Olive, Privet and the Strawberry Tree (Arbutus unedo), but making a last-minute appearance, the star of 2022 has to be our first-known recorded sighting at UCP of the Clifden Nonpareil or Blue Underwing (Catocala



Clifden Nonpareil

(Catocala fraxini)

fraxini).







November Moth (Epirrita dilutata agg.)

This large moth has a wing span of 75-95mm. Once resident in the UK it is now classed as an immigrant, being transported to our shores from the continent on southerly winds. Having said that, Dorset Moths record an increase in numbers in recent years and state there is a possibility of a resident population in the shelter of the Piddle and Frome Valleys.

The larvae feed on Aspen trees (*Populus tremula*) which are present within UCP.

On releasing moths, we try to place them within the box hedging for protection. Unfortunately, the Clifden Nonpareil took flight and was immediately pursued by first a Robin and then a Crow as they attempted to catch it. This resulted in the hilarious spectacle of three grown adults shooing off birds and attempting to re-capture the moth as it hop-skipped across the dewy grass, getting wetter and more bedraggled as it went. Luckily it eventually flew strongly over the wall and away. We can but hope it found sanctuary nearby.

Total for October: 23 Species, 60 Individuals, 2 dates

Common Name	Scientific Name	Individuals
Barred Sallow	Tiliacea aurago	1
Beaded Chestnut	Agrochola lychnidis	2
Black Rustic	Aporophyla nigra	5
Blair's Shoulder-knot	Lithophane leautieri	2
Box-tree Moth	Cydalima perspectalis*	1
Clifden Nonpareil	Catocala fraxini	1
Common Marbled Carpet	Dysstroma truncata	1
Grey Pine Carpet	Thera obeliscata	2

Large Wainscot	Rhizedra lutosa	4
Large Yellow Underwing	Noctua pronuba	7
Lunar Underwing	Omphaloscelis lunosa	2
Merveille du Jour	Griposia aprilina	1
November moth agg.	Epirrita dilutata agg.	2
Red-green Carpet	Chloroclysta siterata	1
Rush Veneer	Nomophila noctuella*	19
Rusty-dot Pearl	Udea ferrugalis*	2
Setaceous Hebrew Character	Xestia c-nigrum	1
Shuttle-shaped Dart	Agrotis puta	1
Silver Y	Autographa gamma	1
Turnip Moth	Agrotis segetum	1
Vestal	Rhodometra sacraria	1
	Palpita vitrealis*	1
	Tachystola acroxantha*	1
23 Species		60

Table 11 Moths trapped during October 2022 (\* micro; BOLD: New for Site

## **NOVEMBER**

9th November 2022 4 species, 4 individuals

Dark Sword-grass (*Agrotis ipsilon*), Red-green Carpet (*Chloroclysta siterata*), micro, Light Brown Apple Moth (Epiphyas posvittana), and one Red-line Quaker (*Agrochola lota*) not recorded since 1990 (9).







Red-line Quaker (Agrochola lota)

Red-green Carpet (Chloroclysta siterata)

Dark Sword-grass (Agrotis ipsilon)

Total for November: 4 Species, 4 Individuals, 1 date

Common Name	Scientific Name	Individuals
Dark Sword-grass	Agrotis ipsilon	1
Light Brown Apple Moth	Epiphyas postvittana*	1
Red-green Carpet	Chloroclysta siterata	1
Red-line Quaker	Agrochola lota	1
4 Species		4

Table 12 Moths trapped during November 2022 (\* micro)

## **DECEMBER**

Due to a stretch of cold weather, followed by many rainy days, no traps were set during December.

## DRAGONFLIES OF UPTON COUNTRY PARK AND HOLES BAY

**Martin Adams** 

## **INTRODUCTION**



## **Golden-ringed Dragonfly**

Dragonflies are an extremely primitive order of insects. They have existed with little change to their basic body shapes for over 300 million years, meaning they existed before the time of the dinosaurs.



**Golden-ringed Dragonfly** 

'Primitive' doesn't mean they are simple or unadvanced however. Far from it: huge multi-faceted eyes - the biggest proportionally in the animal kingdom - give them extraordinary vision; 4 wings that can move independently make them extremely manoeuvrable; and sharp powerful jaws combine to make them fearsome predators.



**Common Darter Dragonfly** 

The term Dragonfly refers to insects of the order Odonata, both 'true' dragonflies (Anisoptera - different wings) and damselflies (Zygoptera - similar wings).

Briefly, damselflies have more slender bodies, a gap between the eyes and tend to rest with their wings outstretched (the diagnostic difference in wing shapes is not easy to see.)





Comparision between Common Darter Dragonfly and Azure Blue Damselfly

The list of Dragonfly species recorded stands at 19 species, fairly modest compared to the Lytchett Bay list of 28 from a far more diverse habitat that had been watched in detail for far longer.

We have been systematically recording Dragonflies since 2021. All the species listed below except two have been recorded in the last 2 years, and unless stated otherwise the species in question has been recorded in both years.

#### **HABITATS**

Dragonflies have an aquatic larval stage, so they need to lay their eggs in or near freshwater. The larvae then go through several stages, sometime over several years before emerging as adults in subsequent summers to repeat the cycle.

The main freshwater bodies are Bascombe's Pond, The Duck Pond, Grove Pond and the canalised stream running behind it, known as 'Dead Man's Ditch' (DMD). Bascombe's Pond is small and quite overgrown, and the Duck Pond often dries up in late summer, which means that Grove Pond and Dead Man's Ditch are the best habitats. Other Ponds around the park have become silted up and overgrown.

The canalised drains that run into Holes Bay are also freshwater, but are hardly prime habitat. Dragonflies can also be found hunting away from freshwater bodies however, especially the larger species, and we have had records from around Upton CP, the Power Station site (Twin Sails) and Holes Bay, especially over the Reed beds around the North West.

#### **DAMSELFLIES**

#### **Beautiful Demoiselle**

An insect that truly earns it's adjective, especially in the moth like display flight of the males. Associated with moving water, they have been recorded in Dead Man's Ditch (occasionally straying onto Grove Pond) with a high count of 14 in July 2022. Not known to have been present before the recent records, although the area may have been overlooked.



**Beautiful Demoiselle male** 



**Beautiful Demoiselle female** 

#### Large Red Damselfly

Recorded in Grove Pond and Bascombe's Pond (2021 only) in small numbers, making them surprisingly scarce for a common, widespread species present in most water bodies.



Large Red Damselfly



**Azure Damselfly** 

## **Azure Damselfly**

The most common Odonata species in the recording area, with 100 individuals counted around the Duck Pond and Grove Pond/DMD in May 2022, included many mating and ovipositing. Recorded in Bascombe's Pond 2021 only.

#### **Common Blue**

Recorded at Twin Sails (2021) and Holes Bay SE, NE and near to (but not on) Bascombe's Pond (2022)

Fairly scant records for a common and widespread species in the water bodies of Upton CP, but fairly persistent numbers of up to 12 present in the long grass near to the channel in Holes Bay June 22<sup>nd</sup> 2023 and smaller numbers noted near the Creekmoor Drain.



**Common Blue Damselfly** 

**Blue-tailed Damselfly** 

## **Blue-tailed Damselfly**

Recorded in the Duck Pond (2021 only) and Dead Man's Ditch with a maximum count of 4 recorded - probably an undercount.

## **Red-eyed Damselfly**

A locally common species - 1 Recorded on Grove Lake June 2021. No known previous records



Red-eyed Damselfly



Small Red-eyed Damselfly

## **Small Red-eyed Damselfly**

A species that has colonised Britain with remarkable speed since it was first recorded in Essex in 1999. Recorded on Grove Lake 2022 with a high count of 3. No previous known records.

#### **DRAGONFLIES**

#### **Common Hawker**

Despite the name, this species is not common in Dorset and seems to have declined. No records 2021/2022. Recorded as present in Upton CP in the early 80s, but with no indication of numbers or frequency.

Interestingly none of the other large Dragonflies below - most of which have expanded in range as the climate has warmed - are listed, although the list may not be comprehensive.

## **Migrant Hawker**

As the name suggests, late autumn migrant although it does breed in Southern England now.

Recorded on Grove Pond (2022) around Holes Bay and Upton CP, frequently over the Reed beds. 1 was recorded in October 2021 on Bascombe's Pond. 3 recorded in the recently cleared area behind the Lookout in August 2022.





Migrant Hawker

Southern Hawker

#### Southern Hawker

A large inquisitive Hawker with a habit of coming up to check people out, recorded around Holes Bay and Upton CP, and on Grove Lake and Bascombe's Pond.

Recorded ovipositing on rotten wood on Bascombe's Pond 2022.

#### **Brown Hawker**

A Common and widespread species recorded in Upton CP, along the shoreline of Holes Bay North, Holes Bay SE, in Grove Lake/ Deadman's ditch (22 only) and at Twin Sails.

3 recorded over various sites July 2022

## **Emperor Dragonfly**



Britain's largest Dragonfly has been recorded around Holes Bay, Upton CP and Grove Lake. Not recorded in the Duck Pond, which had dried up by the time that they emerge, although they have been noted there and on Bascombe's Pond in previous years.

## **Hairy Dragonfly**

A relatively small Hawker that emerges before the other Hawker and Dragonfly species. Scarce and local but increasing in range. Recorded on Grove Lake and Duck Pond (22 only) No known previous records.

## **Golden Ringed Dragonfly**

A large and distinctive Dragonfly, locally common in the South West. Recorded in Holes Bay NE (2021) Deadman's Ditch (2022) Upton CP (20) and around the Power Station site in both years.







**Broad-bodied Chaser** 

## **Downy Emerald**

A scarce and local species with 1 record of an individual on Grove Lake in 1991.

#### **Broad-bodied Chaser**

A common species in Southern England, recorded on the Duck Pond and Grove Lake (2022 only).

Unidentified Chaser species were also noted, possibly including Four-Spotted Chaser, a very common and widespread species with no definite records

#### **Scarce Chaser**

Very local in distribution and classified as Near Threatened. Recorded near Grove Lake 2022 and Bascombe's Pond 2020.





Scarce Chaser

**Common Darter** 

#### **Common Darter**

As the name suggests, common and widespread - the most common true Dragonfly in Lowland Britain.

Recorded around Upton CP, on the Boardwalk, in Holes Bay NE and on Grove Lake/DMD. High count of 14 on the latter July 2022. Late record of November 5th 2020 in Holes Bay NE.

#### **Red-veined Darter**



Scarce vagrant and occasional breeder in Britain, with only a few records a year in Dorset. One record in Holes Bay SE 30/6/2022.

Like many species, they have been increasing in frequency and range, and there have also been records on Brownsea and at Lytchett Bay recently.

## Full Dragonfly Species List for Holes Bay and Upton Country Park

Beautiful Demoiselle	Calopteryx splendens
Large Red Damselfly	Pyrrhosoma nymphula
Azure Damselfly	Coenagrion puella
Common Blue Damselfly	Enallagma cyathigerum
Blue-tailed Damselfly	Ischnura elegans
Red-eyed Damselfly	Erythromma najas
Small Red-eyed Damselfly	Erythromma viridulum
Common Hawker	Aeshna juncea
Migrant Hawker	Aeshna mixta
Southern Hawker	Aeshna cyanea
Brown Hawker	Aeshna grandis
Emperor Dragonfly	Anax imperator
Hairy Dragonfly	Brachytron pratense
Golden Ringed Dragonfly	Cordulegaster boltonii
Downy Emerald	Cordulia aenea
Broad-bodied Chaser	Libellula depressa
Scarce Chaser	Libellula fulva
Common Darter	Sympetrum striolatum
Red-veined Darter	Sympetrum fonscolombii

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# SOME CHANGES IN THE SHORELINE FLORA AT UPTON COUNTRY PARK (NORTH-WEST HOLES BAY) BETWEEN 1988 AND 2018

#### **Nick Woods**

#### **SUMMARY**

In 1988 two vegetation transects were set up in Holes Bay spanning the transition from wet grassland to saltmarsh across the mean high-water mark. A boardwalk (part of the Upton Country Park shoreline trail) had recently been constructed roughly along high-water mark and the area securely fence off from adjacent farmland. Prior to this, it was thought that grazing stock periodically accessed the area and, since the fencing would prevent this, the consequent reduction in grazing might result in changes to the vegetation. The transects were repeated in 2018.

The two transects (25 m and 30 m long) consisted of 50 and 60 quadrats respectively (each 50 cm x 50 cm laid contiguously along the transects). Higher plant cover was recorded using a Domin type cover scale, though in some cases plants were not recorded to species level. Fixed-point photographs were also taken at key points along the transects to record differences in vegetation structure.

The vegetation was shown to have changed markedly between 1988 and 2018:

- i) there was an overall reduction in species diversity, with the number of taxa recorded falling from 29 in 1988 to 22 in 2018
- ii) there was a notable increase in Common Reed (*Phragmites australis*)— although widespread in 2018 the cover levels increased markedly, parts now being almost a pure 'reed bed' (this is also very apparent in the fixed-point photographs)
- iii) there was a notable decrease in Common Cord Grass (Spartina anglica), which disappeared completely from one transect
- iv) the reduction in diversity particularly reflects a decline of species, such as Parsley Water-dropwort (*Oenanthe lachenalii*) and Perennial Sow Thistle (*Sonchus arvensis*) from those upper areas now dominated by Common Reed, in some part compensated by an increase in diversity on the lower parts of the saltmarsh previously dominated by Common Cord Grass, such as Sea Aster (*Aster tripolium*)
- v) although the original concern was that the ending of quite limited grazing would affect the vegetation, and this may be a factor especially in the increase in Common Reed, other factors are also likely to be involved, e.g. the well documented decline of Common Cord Grass in Poole Harbour, which may also be an influence on the occurrence of other species, and even the apparent increase in the area of reed bed
- vi) the transects covered only a part of the transition from wet grassland to saltmarsh and it seems likely that other changes are occurring in the wider landscape e.g. as the adjacent farmland has now been converted to open space as a SANG (Suitable Alternative Natural Greenspace)

## 1. INTRODUCTION

1.1 The 'Shoreline Trail' at Upton Country Park was established in 1987 and included a section of boardwalk approximately 130m long running roughly along the mean high-water mark in Holes Bay. In order to establish the trail, a new stockproof fence was constructed close to the edge of the adjacent farmland (then part of Upton Park Farm). Immediately prior to this, it is thought that only a rudimentary fence separated the shoreline from the adjacent fields, which would have been subject to at least occasional grazing from farm stock. The construction of the fence prevented

such grazing and it was thought that the vegetation along the shore might alter as a result. In 1988 two vegetation transects were therefore established down the shoreline and photos taken to record the state of the vegetation. The transects spanned a transition from an area of wet grassland/marsh well above mean high-water mark to the upper part of the saltmarsh below mean high-water mark.

1.2 A limited amount of recording took place in the next few years and, after a gap of many years, the transects were repeated in 2018.

#### 2. METHODS

2.1 The original record of the location of the two transects is reproduced in Appendix 1. Not all the marker posts were still present in 2018 but where markers posts were missing the transects were re-established on as near the original lines as possible from the original location records. The locations of the transects are shown in Fig. 1 and start and end points are given below (based on GPS readings from 2018). In this report the northern transect is referred to as Transect 1 (N) and the southern one as Transect 2 (S).

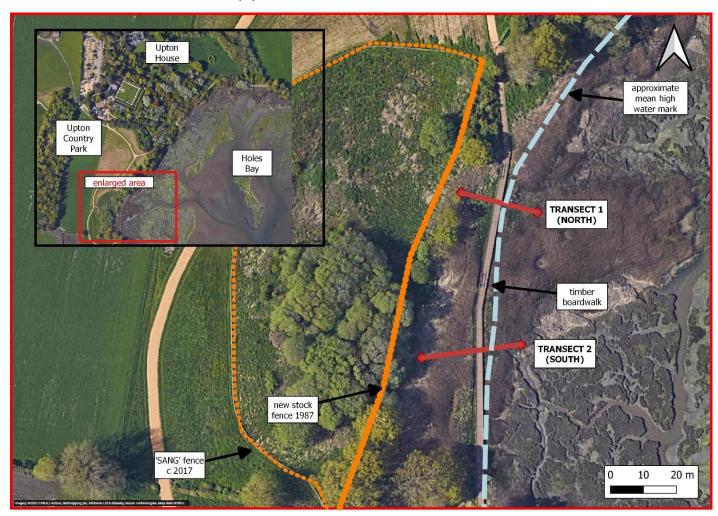


Fig 1 – Location and character of transects, mean high water mark derived from 'Water Lines GB' (contains OS data © Crown copyright and database right 2018).

Transect 1 (N) 25m (50 quadrats)

start - SY9924792479 boardwalk at quadrats 20-24 (part)

end - SY9927092473

Transect 2 (S) 30m (60 quadrats) start - SY9923592429 boardwalk at quadrats 30(part)-34

end - SY9926592433

- 2.2 The two transects ran for a short length either side of the boardwalk. The saltmarsh extends a considerable distance beyond the east ends of both transects. The northern transect especially spans the transition from an area of wet grassland/marsh to saltmarsh, with species such as Parsley Water-dropwort (*Oenanthe lachenalii*) and Perennial Sow Thistle (*Sonchus arvensis*) found in the western part of that transect, these being absent on the southern transect. In addition to the improved stock fence constructed in 1987, the more recent conversion of the adjacent farm fields to a 'SANG' (Suitable Alternative Natural Greenspace') led to an additional fence being constructed around the wet grassland/marsh area as also shown on Fig. 1. Although no stock are now kept in the area this fence restricts public access and excludes the wet grassland/marsh area from the annual cut and remove mowing practised over much of the former farmland. This is likely to result in further changes to the vegetation but these would not be apparent from these transects.
- 2.3 In both 1988 and 2018, contiguous 50 x 50 cm quadrats were laid along the south-side of a tape stretched between the end posts of each transect with the quadrats numbered from east to west (i.e., from above to below high-water mark). All higher plant species were recorded using a Domin-type scale to record cover in each quadrat:

#### **Domin value**

1	1 – 2 individual plants present
2	Less than 1 % cover
3	1 – 4 % cover
4	5 – 10 % cover
5	11 – 25% cover
6	26 – 33 % cover
7	34 – 50 % cover
8	51 – 75% cover
9	76 – 90 % cover
10	91 – 100 % cover

- 2.4 Where possible in both 1988 and 2018 all higher plants were recorded to species level, though in some cases recording was only done to genus level e.g. Saltmarsh Grass (*Puccinellia* sp) or to a much cruder level (e.g. in 1988 'Broad-leaved grasses' and 'Fine-leaved grasses' were recorded). In addition, there were some possible inconsistencies in the species recorded between 1988 and 2018, e.g. Common Scurvy Grass (*Cochlearia officinalis*) was recorded in 1988 but English Scurvy Grass (*Cochlearia anglica*) was recorded in 2018. It is felt likely that both records should refer to English Scurvy Grass, but records have simply been treated as Scurvy Grass (*Cochlearia* sp.) in this report. Appendix 2 outlines the approach taken here to such issues.
- 2.5 Photos were also taken at set points (notably the start/finish of each transect and where it crossed the boardwalk) to enable changes in the structure of the vegetation to be seen.
- 2.6 Initially efforts were made to repeat the transects on an annual basis but generally resources were not available to do this and this report concentrates on a simple comparison between the results for 1988 and 2018.

#### 3. RESULTS

3.1 *Fixed-point photographs* - Gross changes in the structure of the vegetation can be seen most easily by comparing the photos taken along the transects in 1988 and 2018. These photos, reproduced in Appendix 3, show the vegetation looking along the transects from start and finish and from the boardwalk (in both directions). As an example, the photos from the start of Transect 1 (N), are shown in Fig 2. This shows the vegetation to be much taller with Common Reed (*Phragmites communis*) much more dominant in the foreground of the photo in 2018 compared to

1988. The growth was so tall and dense that locating the posts marking the west end of the transects was often extremely difficult; if the posts were still present it was often not possible to see them until virtually next to them.

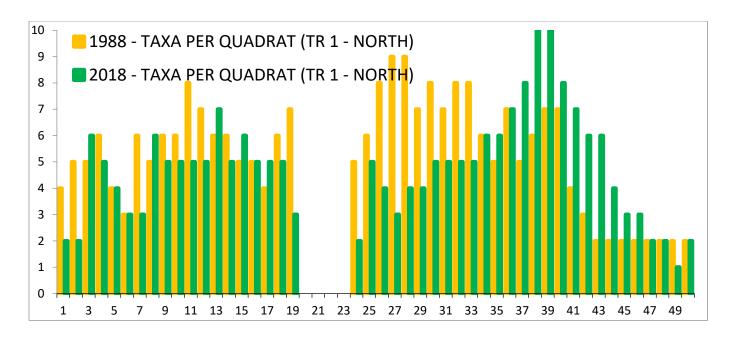




Fig 2 – Looking east from the start of Transect 1 (N) on 13th August 1988 (left) and 3rd September 2019 (right). Note large increase in cover of Common Reed.

3.2 **Species diversity** - The full results of the plant cover recorded on transect 1 (N) and transect 2 (S) are detailed in Appendices 4 and 5 respectively. The number of taxa recorded on the transects fell from 29 in 1988 to 22 in 2018, with declines on both transects (from 27 to 20 taxa for the north transect and 16 to 11 for the south transect). The number of taxa recorded per quadrat fell in 66 of the 110 quadrats (60%) recorded along the two transects, with 23 (21%) showing an increase and 21 (19%) showing no change. The number of taxa recorded along each transect in both years are shown in the Fig 3.

3.3 In general, the number of taxa recorded decreased between 1988 and 2018 along the western section of both quadrats and increased along the eastern part of the quadrat (lower down the shore). This was most striking on transect 2 (S), where, between the start of the transect and the boardwalk (30 quadrats), the mean number of taxa recorded fell from 4.9 to 1.2. As discussed below, the vegetation in this section had become dominated almost exclusively by Common Reed by 2018.



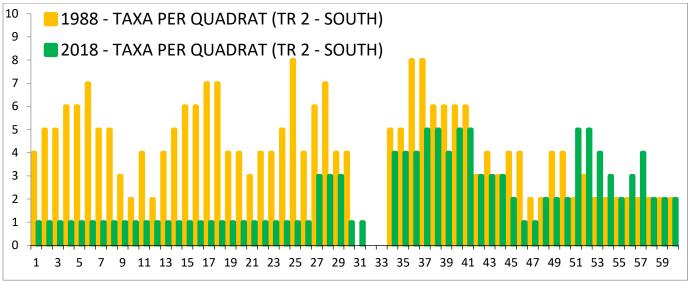
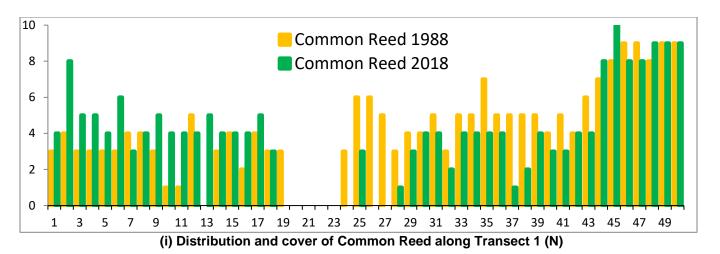


Fig 3 - Number of taxa recorded along transects in 1988 and 2018.

- **3.4 Changes amongst the most widespread species** The most widespread taxa record in 1988 were Common Reed and Common Cord Grass (*Spartina anglica*) which were recorded in 79% and 49% of the quadrats (along both transects) respectively. Both these species show dramatic and contrasting changes in distribution and/or abundance between 1988 and 2018 as shown in Figs 4 below.
- 3.5 Common Reed has increased in frequency and abundance along the transects with the increase in abundance especially dramatic in the western part of transect 2 (S), where it now is recorded with a Domin value of 10 for the first 31 quadrats. This increased abundance is also evident in the photos taken (see Fig 2 and Appendix 3). Common Cord Grass, by contrast, has decreased dramatically in both frequency and abundance, disappearing completely from transect 2 (S). This is also shown in the photos in Appendix 3 especially the photos taken from the east end of transect 2(S), which clearly show the change in the relative abundance of Common Reed and Common Cord Grass. In parallel with these changes, the amount of bare ground (Figs 9 and 10) has decreased in the upper part of both transects and increased in the lower parts.



Common Reed

1988

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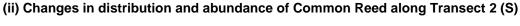
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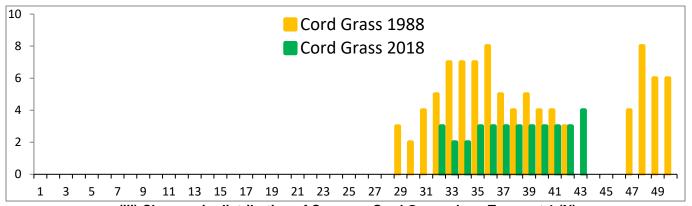
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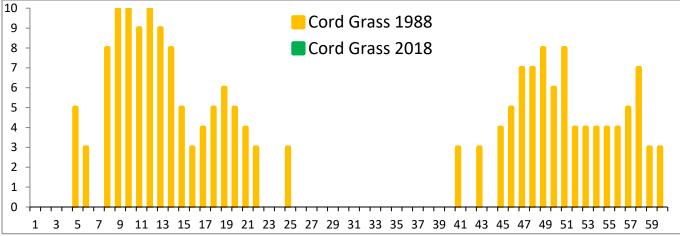
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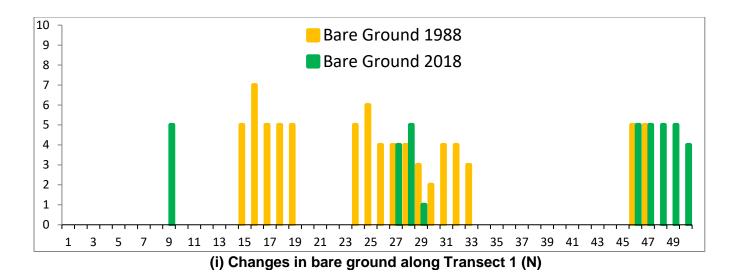


(iii) Changes in distribution of Common Cord Grass along Transect 1 (N)



(iv) change in distribution and cover of Common Cord Grass along Transect 2 (S)

Fig 4 – Changes in distribution and cover of Common Reed and Common Cord Grass



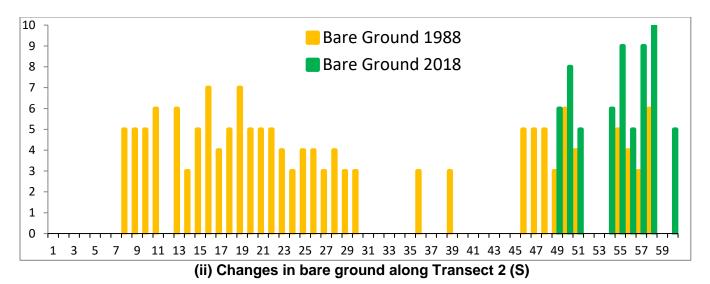


Fig 5 - changes in distribution of bare ground

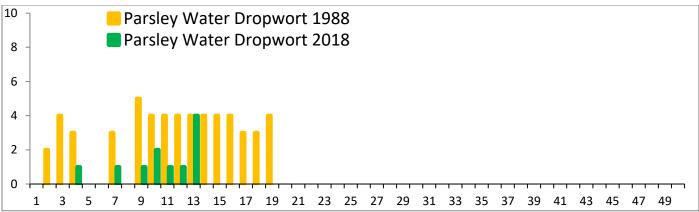
- **3.6 Changes amongst other species** Appendix 6 lists those taxa recorded in 10% or more quadrats on either transect in 1988 or 2018 and shows the change in the number of quadrats and the sum of the cover values for both transects. In addition to the changes shown by Common Reed and Common Cord Grass, several of the other species showed substantial changes in distribution and/or abundance.
- 3.7 Ignoring the taxa not identified to genus level (e.g. "Fine-leaved grass"), the following species decreased in abundance by 10% or more in the number of quadrats:

		change in no. quadrats	change in total cover
Spear-leaved Orache	Atriplex hastata	-88%	-96%
Sea Plantain	Plantago maritima	-79%	-91%
"Couch Grass"	Elytrigia sp.	-53%	-51%
Parsley Water-dropwort	Oenanthe lachenalia	-53%	-80%
Sea Purslane	Halimone portulacoides	-47%	-55%
Scurvy Grass	Cochlearia sp.	-43%	-23%
Perennial Sow Thistle	Sonchus arvensis	-40%	-80%
Saltmarsh Rush	Juncus gerardii	-35%	-13%
Greater Sea Spurrey	Spergularia media	-33%	-42%
Sea Aster	Aster tripolium	-23%	-10%

The following species increased in the number of quadrats by 10% or more:

		change in no. quadrats	change in total cover
Sea Milkwort	Glaux maritima	200%	188%
Common Sea Lavender	Limonium vulgare	111%	156%
Sea Rush	Juncus maritima	60%	58%
Saltmarsh grass	Puccinelia sp.	33%	63%
Sea Arrow Grass	Triglochin maritima	14%	36%

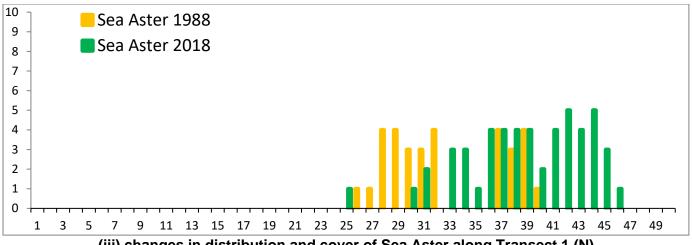
- 3.8 Although the changes in the total cover (as percentage change between 1988 and 2018) are often similar to the changes in the number of quadrats, it should be remembered that the Dominstyle cover scale used is not linear, running from 1 (for 1 or 2 individual plants) to 10 (for 91-100% cover).
- 3.9 Five species were recorded in only one or two quadrats in 1988 but not recorded at all in 2018: Creeping Thistle (*Cirsium arvense*), Jointed Rush (*Juncus articulatus*), Soft Rush (*Juncus effusus*), Common Fleabane (*Pulicaria dysenterica*) and Glasswort (*Salicornia sp*). The first four of these species are plants that might be expected to be seen on the higher levels of the transition, where the increase of Common Reed was most dramatic, though Glasswort is more characteristic of the lower areas of marsh and might have been expected to increase with the decline of Common Cord Grass. Hemp Agrimony (*Eupatorium cannabinum*) and Pedunculate Oak (*Quercus robur*) as a seedling were recorded only in 2018 (both in single quadrats only). Whilst these species are more likely to be present higher up the shoreline and perhaps less likely to survive under dense Common Reed Cover, there is likely to be some 'turnover' in species, and occasional disappearance or arrival of species probably occurs.
- 3.10 Changes on individual transects: Transect 1 (N) Fig. 6 demonstrates that some species are associated with the upper parts of the transition and some to the lower part, and also shows some of the changes in less dominant species that have occurred along transect 1 (N). Hence, Parsley Water-dropwort and Perennial Sow-thistle were restricted in both years to the upper part of the transect and both declined greatly between 1988 and 2018. In contrast Sea Aster (Aster tripolium) and Sea Purslane (Atriplex portulacoides) were restricted to the lower part of the transect in both years. The former increasing in abundance and the latter decreasing. The decline in those species more characteristic of the upper part of the transects may be associated with the increased cover of Common Reed (though this is much more marked on transect 2 (S). Equally, the increase in abundance of those species on the lower part of the transect may be associated with the decline of Common Cord Grass. Sea Aster seems to have extended its range down the transect, where the decline in Common Cord Grass has been accompanied by an increase in the amount of bare ground. The changes shown for Sea Purslane suggest that the pattern of change may be more complex. Sea Purslane can establish itself along creek margins in dense stands of Common Cord Grass <sup>1</sup> and it is possible that the decline of Common Cord Grass has resulted in some erosion, and increase of bare ground and that this has been accompanied by a reduction in Sea Purslane.



(i) Changes in distribution and abundance of Parsley Water-dropwort along Transect<sup>1</sup> (N)



(ii) Changes in distribution and abundance of Perennial Sow Thistle along Transect 1 (N)



(iii) changes in distribution and cover of Sea Aster along Transect 1 (N)

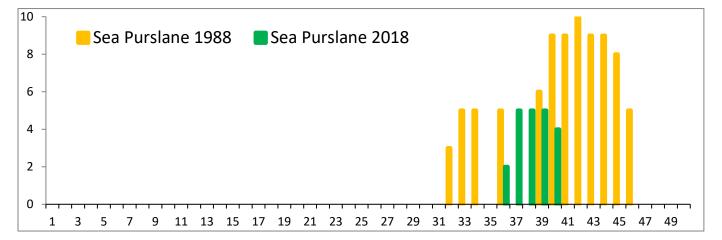
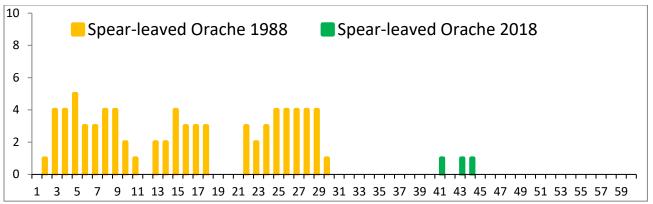
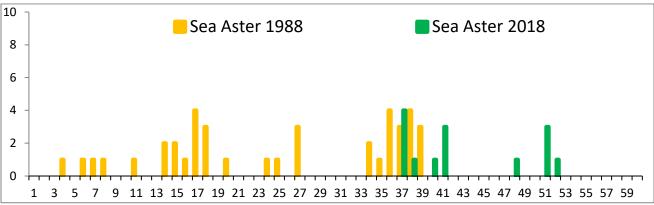


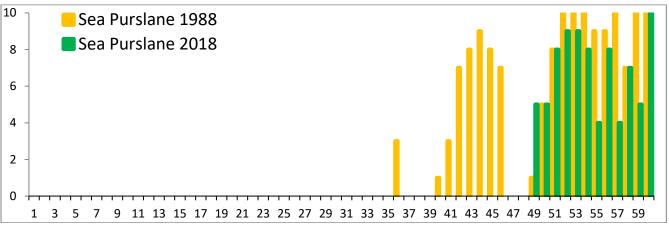
Fig. 6 – Changes in distribution and abundance of selected species along Transect 1 (N)



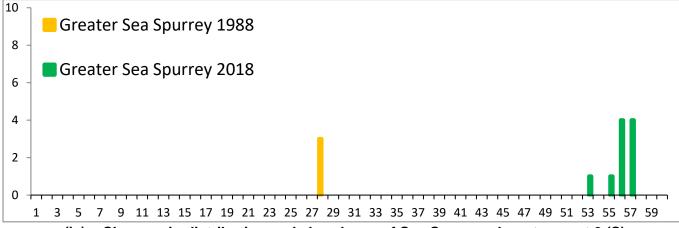
(i) Changes in distribution and abundance of Spear-leaved Orache along Transect 2 (S)



(ii) Changes in distribution and abundance of Sea Aster along Transect 2 (S)



(iii) - Changes in distribution and abundance of Sea Purslane along Transect 2 (S)



(iv) - Changes in distribution and abundance of Sea Spurrey along transect 2 (S)

Fig. 7 – Changes in distribution and cover of selected species along Transect 2 (S)

**3.11** Changes on individual transects: transect 2(S) - The changes in the occurrence of Common Reed and Common Cord Grass have been even more dramatic on transect 2 (S) than on transect 1 (N), with Common Reed forming an almost pure community on the upper part of the transect (with 91-100%) cover above the boardwalk in 2018. In contrast Common Cord Grass has completely disappeared from the transect. The changes of selected other species are shown in Fig 6. As with transect 1 (N) the change in the occurrence of other species has perhaps been influenced by the changes shown by Common Reed and Common Cord Grass, with both Spearleaved Orache, and Sea Aster disappearing from the upper part of the transect but increasing on the lower section. Again, the changes in the occurrence of Sea Purslane are more complex with a decline in some areas, e.g. quadrats 40-46 but relatively little change in the lowest part of the transect. Greater Sea Spurrey disappeared from the one quadrat it was recorded on the upper part of the transect (though this was close to the boardwalk) but has appeared on four quadrats on the lowest part of the transect.

#### 4. DISCUSSION

- 4.1 These examples illustrate how the overall reduction in diversity recorded along the transects was particularly due to a loss of species such as Parsley Water-dropwort and Perennial Sow Thistle in the upper sections of the transects, often accompanied by some increase in cover levels of Common Reed (which was originally widespread but at lower cover values). The large reduction in the amount of Common Cord Grass in the lower sections seems to have been accompanied by some increase in other plant species, e.g. Sea Aster. In some parts of Holes Bay Common Cord Grass had previously formed a dense, relatively tall sward with few other species present and its decline is evident even in general photos of the landscape<sup>7</sup>. These transects show it declining in a more mixed community, though it is not possible to say if the vegetation in 1988 was fundamentally different from the denser stands once known or represented a stage in the decline of previously denser, purer stand of Common Cord Grass.
- 4.2 It is known that Common Reed can invade areas dominated by Common Cord Grass¹ and the ability of a few perennial species to dominate un-grazed saltmarsh has also been noted, with, in some places, rare plants 'succumbing to the tyranny of the reeds <sup>5</sup>. Before the advent of farming, it is likely that saltmarshes would have been used by native large herbivores, so some grazing by domestic stock could be seen as replicating a previous 'natural' process. Though it is also interesting to note that Ordnance Survey maps from the beginning of the twentieth century show the area below high-water mark of ordinary tides simply as mud<sup>3,6</sup>; it is possible that Common Cord Grass 'paved the way' for colonisation of other species, and ultimately for the development of 'reed beds' in this location.
- 4.3 Although the pattern of change was similar on both transects, the changes were far more extreme on transect 2 (S). The differences between the two transect show that there is some variation in the character of the vegetation in this area and it should be noted that the two transects represent only a small part of the shoreline of Holes Bay.
- 4.4 The reason for establishing the transects was that a reduction in sporadic grazing might affect the vegetation and, after, thirty years the vegetation has certainly changed (although both surveys are only 'snap shots' taken at particular times). However, it seems reasonable to assume that the increase in Common Reed and decrease in Common Cord Grass are relatively long-term trends. The level of grazing prior to 1988 is not known, though it must have occurred regularly enough to have been identified as a potential factor at the time. Prior to 1987 the formal farm tenancy seems to have extended roughly to the line established by the new fence installed in that year and this also seems to have been the case in 1899². However, documents from 1911³ and 1941⁴ both suggest that the area actually occupied by the farm tenant has, at times, extended down to 'the high-water mark of ordinary tides'. The Llewellin family, who owned the Upton estate moved out of

Upton House in 1957 and it seems likely that fences separating small areas of land held in-hand would have been less regularly maintained after that point, unless it was in the interest of the tenant farmer.

- 4.5 Although some parts of Poole Harbour are regularly grazed by large numbers of Sika Deer, these are rarely, if ever, recorded in Holes Bay. There are occasional records of Roe Deer on the salt marsh but these are usually of only one or two animals. Large numbers of wildfowl do occur and some, e.g. Wigeon and Canada Geese, have been seen grazing on salt marsh plants. However, these are unlikely to occur in any numbers where the transects are located since the boardwalk is in regular use by walkers.
- 4.6 In addition to the sporadic grazing there would have been some impact on the vegetation due to the construction of the boardwalk though the contractor was asked to minimise this by working as far as possible from each end, and this seems to have been the case (see Fig. 8). The boardwalk is now well-used by the public but there seems relatively little sign of trampling away from it.





Fig. 8 – Boardwalk under construction and on completion c 1987/8 showing degree of trampling and ground disturbance

4.7 Other changes that might affect the vegetation include changes in agricultural practices on the adjacent land, this has gone from being farmland (once a mixed farm to one concentrating on livestock, and with a dairy herd later replaced by beef cattle) to an area of 'SANG' (Suitable Alternative Natural Greenspace) where much is subject to an annual cut and remove 'wildflower cut') though the areas including the transects and immediately to the west have been excluded from these and currently receive no management. These changes could, for example, have resulted in varying amounts of nutrient run-off from the adjacent land. It also possible that sealevel change has, or will have, an effect on the area.

### 5. CONCLUSIONS

- 5.1 The transects show some clear changes in the shoreline vegetation between 1988 and 2018, despite some limitations in the recording methods (e.g. the failure to identify to species level all the taxa). The differences include:
- i) an overall general reduction in species diversity
- ii) a notable increase in Common Reed although widespread in 2018 the cover levels have increased markedly, parts now being almost a pure 'reed bed'
- iii) a notable decrease in Common Cord Grass in terms of both distribution and cover

- iv) the reduction in diversity particularly reflects a loss of species from those upper areas now dominated by Common Reed, in some part compensated by an increase in diversity on the lower parts of the saltmarsh previously dominated by Common Cord Grass
- v) although the original concern was that the ending of quite limited grazing would affect the vegetation, and this may be a factor especially in the increase in Common Reed, other factors may also be involved, e.g. spread and, later, the decline of Common Cord Grass which has been widely documented in Holes Bay<sup>7</sup> and more widely in Poole Harbour<sup>8</sup> and could have influenced the occurrence of other species in a number of ways
- vi) the transects did not fully cover the transition from a terrestrial (wet grassland) to mudflat and saltmarsh and it seems likely that other changes are occurring in the vegetation arising from changing land-use patterns including the conversion of the adjacent farmland to SANG.

### 6. ACKNOWLEDGEMENTS

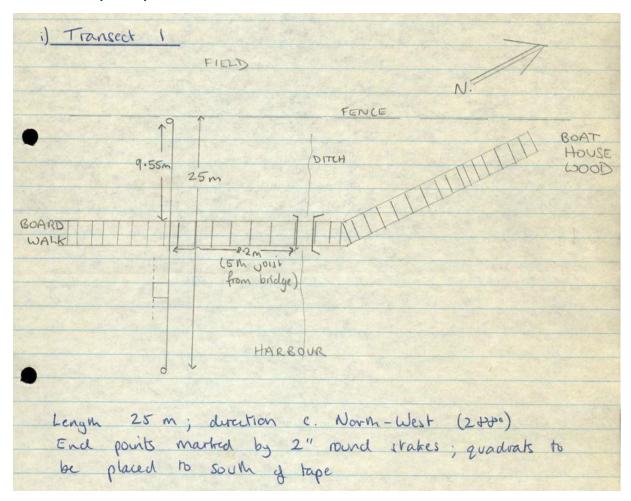
The help of Jez Martin (Biodiversity Officer Bournemouth, Christchurch and Poole Council), who helped with the vegetation recording in 2018, and past and present staff of Upton Country Park is gratefully acknowledged.

#### 7. REFERENCES

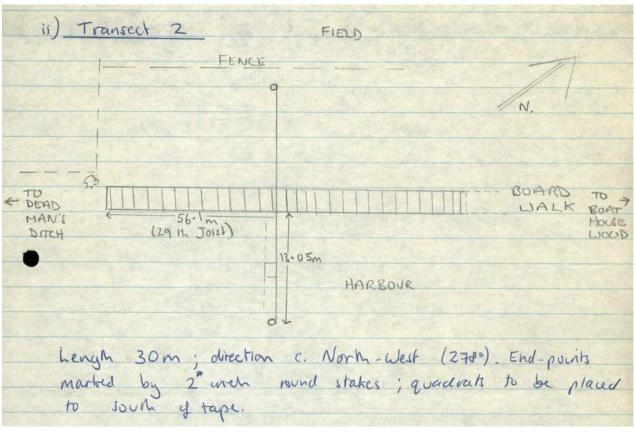
- <sup>1</sup> Rodwell, J. S. (editor) 2000. British Plant Communities Vol 5 Maritime communities and vegetation of open habitats
- <sup>2</sup> Unpublished sale catalogue for 'Upton Manor Poole, Dorsetshire' 1899 photocopy held by author.
- <sup>3</sup> Finance Act 1910 Record Sheet Plan Dorset XLIII 12 (The National Archives IR 125/1/157)
- <sup>4</sup> National Farm Survey Maps 1941-1943 Dorset 43 SE (The National Archives MAF 73/11/43)
- <sup>5</sup> Chatters, Clive 2017. Saltmarsh, Bloomsbury (British Wildlife Collection No. 5)
- <sup>6</sup> Ordnance Survey. Six-inch to the mile sheet Dorset XL111.SE surveyed 1886 (accessed at the National Library of Scotland website: <a href="https://maps.nls.uk/view/101447111">https://maps.nls.uk/view/101447111</a>)
- <sup>7</sup> Woods, Nick 2020. Spartina, birds and bird watching in Holes Bay in Holes Bay Nature Park Report 2020
- <sup>8</sup> Raybould, A. 2005 *History and Ecology of Spartina anglica in Poole Harbour* in The Ecology of Poole Harbour, Proceedings in Marine Science (edited by J. Humphreys and V. May), Elsevier.

## **APPENDIX 1 – Original location information for transects**

## Transect 1 (north)



## Transect 2 (south)



## APPENDIX 2 - Notes on species recorded

Taxon used in comparison	Includes these taxa recorded in 1988	Includes these taxa recorded in 2018	Notes
Scurvy Grass (Cochlearia sp.)	Common Scurvy Grass (Cochlearia officinalis) Transect- 1(N) 10 Transect -2(S) 4	English Scurvy Grass Cochlearia anglica N8 Transect- 1(N) 8 Transect -2(S)	From known distributions and habitat preferences it is likely that both sets of records refer to English Scurvy Grass (C. anglica).
"Couch Grass" (Elytrigia sp.)	Sea Couch (Elymus pycnathus) Transect- 1(N) 1 Transect -2(S) 16	Common Couch (Elytrigia repens) Transect- 1(N) 5 Transect -2(S) 3	Modern floras indicate that Common Couch is likely to be found in maritime habitats whereas earlier floras fail to do so. Although different species may have been present on the earlier survey, it seems safer to "lump" both species together in assessing results.
"Saltmarsh Grass" (Puccinellia sp probably P. maritima)	"Saltmarsh Grass" (Puccinellia sp.) Transect- 1(N) 0 Transect -2(S) 3	Common Saltmarsh Grass (Puccinellia maritima)" Transect- 1(N) 0 Transect -2(S) 4	Although other species have been recorded in Dorset; their distribution and habitat preferences suggest both sets of records refer to Common Saltmarsh Grass.
"Broad-leaved grass" e.g Creeping Bent (Agrostis stolonifera)	"Broad-leaved grass" Transect - 1(N)18 Transect -2(S) 12	"Creeping Bent (Agrostis stolonifera)" Transect- 1(N) 8 Transect -2(S) 3	In 1988 three "types" of grass were not identified to species level, making comparisons difficult between the two years. It seems likely that the both species identified in 2018 would also have been present in 1988 and the "fine-leaved" and "broad-leaved" grasses have been lumped accordingly.
"Fine-leaved grass" e.g. Velvet Bent (Agrostis canina)	"Fine-leaved grass" Transect - 1(N) 14 Transect -2(S) 0	"Velvet Bent (Agrostis canina)"; "Probably Velvet Bent (Agrostis canina)"; and "Fine leaved Agrostis" Transect- 1(N) 5 Transect -2(S) 12	In 1988 a category "Unidentified grass" was also recorded further complicating comparisons. However, in both years these grasses were most abundant on the west part of Transect 1 [TRANSECT 2 NOT LOOKED AT YET] and the distribution and abundance of all the grasses was much reduced between 1988 and 2018.
"Unidentified grass"	"Unidentified grass" Transect - 1(N) 12 Transect -2(S)	No comparable taxon.	

## APPENDIX 3 – Comparison photos along the transects 1988 and 2018



Transect 1(N) – quadrat 1 looking east (13/08/1998)



Transect 1(N) -quadrat 20 looking west 13/08/1988



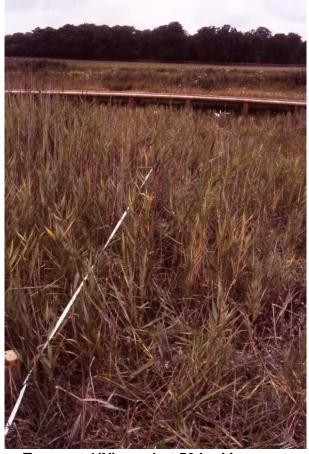
Transect 1(N) – quadrat 1 looking east (03/09/2018)



Transect 1(N) – quadrat 20 looking west (03/08/2018



Transect 1(N) – quadrat 22 looking east 13/08/1988



Transect 1(N) quadrat 50 looking west 13/08/1988



Transect 1(N) – quadrat 24 looking east 03/09/2018



Transect 1(N) quadrat 50 looking west 03/08/2018

## Transect 2 Photos 1988 and 2018



Transect 2(S) – quadrat 1 looking east 24/08/1988



Transect 2(S) – quadrat 30 looking west 24/08/1988



Transect 2(S) - quadrat 1 looking east 21/08/2018



Transect 2(S) – quadrat 30 looking west 21/08/2018



Transect 2(S) – quadrat 34 looking east 24/08/1988



Transect 2(S) – quadrat 60 looking west 24/08/1988



Transect 2(S) – quadrat 34 looking east 21/08/2018



Transect 2(S) – quadrat 60 looking west 21/08/2018

## APPENDIX 4 - TRANSECT 1 (NORTH) RESULTS FOR 1988 AND 2018

														_														_				_		_				1
TRANSECT 1 (NORTH) F	RESULTS FOR 1988 AND 2018	1 2 :	2 4 5	-	7 0	0 10	11 1	12 12	14 15	16 1	7 10	10 20	21 22	22 24	25 26	27 20	20	20 21	22 22	24 25 2	6 27	20 20	40 41	42 42	44 45	16 1	7 40	40 50	E1 E2	E2 E4	55 56 5	E7 E0	50 6	No Os	Ave cover	Total cover	quadrats >5	TO GRAPH
Thrift	Armeria maritima	1 2 :	3 4 3	0	/ 0	9 10	11 .	12 13	14 15	10 1.	./ 16	19 20	21 22	23 24	25 20	2/ 20	29	30 31	32 33	34 33 3	0 3/	36 39	40 41	42 43	44 45	40 4	/ 46	49 50	31 32	33 34	33 30 3	3/ 38	39 0	0 NO US	0.0	notarcover	quadrats >5	10 околен
There	Armena mantima	+++	+	+	-	_	+	$\overline{}$	-	-	+	$\rightarrow$	$\rightarrow$	_	+	+	+	$\rightarrow$	-	$\rightarrow$	_	$\rightarrow$	_	_	$\vdash$	++	+	_	_	-		_	+	0	0.0	0	0	-
Sea Aster	Aster tripolium						_								- 1	1 4	4	2 2				3 4	1											11	2.9	32	1	
Sea Aster	Aster tripolium	-			-		+ +	$\rightarrow$				$\rightarrow$	$\rightarrow$	_		1 4	4	3 3		2 1	1 4		2 4		r 2			_			-	_		17	3.0	51	1	1
Spear-leaved Orache	Atriplex hastata	5		_		_	_	$\overline{}$			-	_	_		1	_	_	1 2	3	3 1 1	4 4	4 4	2 4	5 4	0 0	1	_	_				_	_	1	5.0	5	0	
Spear-leaved Orache	Atriplex hastata			-	-		+ +	+			+	$\rightarrow$	-				+ +	-				-				++	+	_						0	0.0	0	0	
Creeping Thistle	Cirsium arvense	1					_				_									_														1	1.0	1	0	
Creening Thistle	Circium aniense	+++		_			_	$\rightarrow$			$\rightarrow$	$\rightarrow$	$\rightarrow$				+ +	$\rightarrow$				-					$\rightarrow$	_				_		0	0.0	0	0	
Scurvy grass	Cochlearia sp.			_		_	_					_	$\overline{}$		4	2 3		3 2	2 2	_		3 3										_		10	2.5	25	1	1
Scurvy grass	Cochlearia sp.	+	-	+				-			+	$\rightarrow$	$\rightarrow$		2	1 1	+ +	-				4 3	4 4	5 4	4							_		8	3.8	30	1	
"Couch Grass"	Elytrigia sp				3																													1	3.0	3	0	
"Couch Grass"	Elytrigia sp	+		+	,	3	_	4 5	6 4		+	$\rightarrow$	$\rightarrow$		-			$\rightarrow$				-						_	_		-	_		5	4.4	22	1	1
Hemp Agrimony	Eupatorium cannabinum	-				-	-					-	-					-				$\neg \neg$												0	0.0	0	0	_
Hemp Agrimony	Eunatorium cannabinum		1					-										-																1	1.0	1	0	
Sea Milkwort	Glaux maritima										4	4																						2	4.0	8	0	
Sea Milkwort	Glaux maritima							3	1	4 6	5 5	4																						6	3.8	23	1	1
Sea Purslane	Halimone portulacoides		-	-	$\neg$		-		$\neg$			$\neg \neg$	$\neg$				$\overline{}$	$\neg$	3 5	5	,	6	9 9	10 9	9 8	5	$\neg$					-		12	6.9	83	1	1
Sea Purslane	Halimone portulacoides											$\neg$	$\neg$					$\neg$					4				$\top$							5	4.2	21	1	
Jointed Rush	Juncus articulatus				3										3																			2	3.0	6	0	
Jointed Rush	Juncus articulatus																																	0	0.0	0	0	
Soft Rush	Juncus effusus		3				$\Box$	$\neg \neg \neg$				-	$\neg$				$\Box$	$\neg \neg \neg$			$-\Box$						$\Box$							1	3.0	3	0	
Soft Rush	Juncus effusus							$\neg$				$\neg \vdash \neg$	$\neg$				-	$\neg$																0	0.0	0	0	
Saltmarsh Rush	Juncus gerardi				3	6 5	5	5 5	5 5	6 8	8 8	8		3	4 4		2																	16	5.1	82	1	1
Saltmarsh Rush	Juncus gerardi		4 5		9	5 8	9	9 6	6 7	5 7	7 8	8		4		9 6	4	4 6	9 9	8 8 !	8 6	3 2												30	6.7	202	1	
Sea Rush	Juncus maritma														4 4	4 2																		4	3.5	14	0	
Sea Rush	Juncus maritma	9 7 (	6 8 6	8	9 4		3							5	5 5	5 7	9	7 6																17	6.4	109	1	1
Common Sea Lavender	Limonium vulgare													1		1 1		1			5 9	8 4	3											9	3.8	34	1	1
Common Sea Lavender	Limonium vulgare														1				1 3	8 5 !	5 5	5 5	4 9	9 8	6 4	4 2	2 2	1						19	4.6	87	1	
Parsley Water Dropwort	Oenanthe lachenalii	2 4	4 3					4 4	4 4	4 3	3 3	4	$\rightarrow$	_	$\vdash$	+	+	$\rightarrow$	-	$\rightarrow$		-	_			$\perp$	$\perp$	_		-		_		15	3.7	55	1	1
Parsley Water Dropwort	Oenanthe lachenalii		1			1 2	-	1 4	3 4			$\rightarrow$	$\perp$							$\rightarrow$			1 5	4 6			$\perp$					_		7	1.6	11	1	
Common Reed	Phragmites australis	3 4	3 3 3					5	3 4	2 4	4 3	3	$\rightarrow$	3	6 6	5 3	4	4 5		5 7 !	5 5	5 5	4 5	4 6	7 8	9 9	8 (	9 9	_		-	_		45 42	4.7	210	1	1
Sea Plantain	Philagrilles australis	4 8 !	5 5 4	0	3 4	5 4	4	4 5	4 4	4 5	) 3	3	_	-	4 4	1	3	4 4		5 4	+ 1	2 4	3 3	4 4	8 10	0 0	5 9	9 9						8	4.4	35	1	
Sea Plantain	Plantago maritima	+++		+	-		+	-	-	$\vdash$	+	3	+	3	4 4	+	+	$\rightarrow$	2 2	5 4	_		4			++	+	_	_		-	_	+	3	2.0	6	0	-
Saltmarsh Grass	Puccinellia maritima (probably)							_			$\rightarrow$									_		1 1	4				_							0	0.0	0	0	
Saltmarch Grass	Pussinellia maritima (probably)			-			-										+ +					-				-		_	_			_		0	0.0	0	0	
Common Fleabane	Pulicaris dysenterica			_		_	1	$\overline{}$		_	$\overline{}$	-	$\overline{}$				_	-		$\overline{}$		-					$\overline{}$	_				_		1	1.0	1	0	
Common Fleahane	Pulicaris dysenterica			-			-	-				-	-					-				-					-							0	0.0	0	0	
Oak (seedling)	Quercus robur																																	0	0.0	0	0	
Oak (seedling)	Quercus robur		1																															1	1.0	1	0	
Glasswort	Salicornia sp.							$\neg$					$\neg$			3	T	$\neg \neg$	1															2	2.0	4	0	
Glasswort	Salicornia sp.																																	0	0.0	0	0	
Perennial Sow Thistle	Sonchus arvensis		3 4 3		3	4		3 5	4 5	2																								10	3.6	36	1	1
Perennial Sow Thistle	Sonchus arvensis		1 2	1	1	1 1																												6	1.2	7	1	
Cord Grass	Spartina anglica																3	2 4		7 7 :			4 4			4	1 8	6 6						18	5.1	92	1	1
Cord Grass	Spartina anglica	$\perp$	$\bot$	$\perp$		$\perp$	$\bot$	$\perp$	-	$\vdash$	$\perp$		$\rightarrow$		$\perp$	$\perp \perp$	$\bot$	-	3 2	2 3 :	, ,	3 3	3 3	3 4	oxdot	$\perp$	$\perp$			$\perp$			$\perp \perp$	12	2.9	35	1	
Greater Sea Spurrey	Spergularia media														2	5 4	4	4 4	3	4 2 :	1 1	4 4	3											14	3.2	45	1	1
Greater Sea Spurrey	Spergularia media																				3	3 3	2 3	4										6	3.0	18	1	
Annual Seablite	Suaeda maritima	+	++	+	$\perp$		+	$\dashv$	-	$\vdash$	$\perp$	$\perp$	$\rightarrow$	_	++	3	+	$\rightarrow$	1	+	$\perp$	$\Box$	_		$\vdash$	++	+	_		-	$\vdash$	_	$\perp \perp$	2	2.0	4	0	1
Annual Seablite	Suaeda maritima	$\overline{}$			-		$\perp$						$\rightarrow$							$\perp$	$\perp$			1			$\perp$					_		1	1.0	1	0	
Sea Arrow Grass	Triglochin maritma	-		$\vdash$	-	_			2	2	2 3	2		3	4 5	5 4	3	2 3	7			2 2					-							11	3.3 4.6	36	1	1
Dea Arrow Grass	inguenin mantma		9 8 8		0 6	5	4	4 3		ь 4	* b	/			4	5 5	5	о в	1	0 5	9 4	2 2	2				-							21 14	6.4	96	1	
"Fine-leaved grass" e.g. Vel "Fine-leaved grass" e.g. Vel	lvet "Fine-leaved grass" e.g. Velvet Bent ( lvet "Fine-leaved grass" e.g. Velvet Bent (		9 8 8	9	9 6	o 5	4	4 3	4 2	$\vdash$	+	+	+	-	+	++	+	+	++	++	+	+++	_	$\vdash$	$\vdash$	+	+		_	+	++	_	++	14	2.6	90	1	1
	ree "Broad-leaved grass" e.g. Velvet Bent (			0		4 -	-				2	2	$\rightarrow$					$\rightarrow$									$\rightarrow$							18	5.3	95	1	
"Prood loaved grass" C	"Record leaved grass" or Consider the	ont (Agractic stal	0 8	٥	0 /	4 5		3 3	3	3 4	1 1	_															+							10	3.1	95	1	1
Unidentifed grass e.g.c	Unidentifed grass e.g creeping b	mgrostis stol	3					J 3		3 4						4 4	5	5 5	5 2	8 6	5		3 3											12	4.6	55	1	1
Unidentifed grass	Unidentified grass	+++	+	1	-		+ +	$\dashv$	-		+	$\dashv$	$\dashv$	_		+ - + -	+-+	-   -		-   -		$\vdash$	- 13	$\vdash$		+ +	+	_			++			0	0.0	0	0	1
Unidentified plant	Unidentified plant						2	3 2																										3	2.3	7	0	
Unidentified plant	Unidentified plant																																	0	0.0	0	0	
Moss	Moss					А	4																				$\overline{}$							2	4.0	8	0	
Moss	Moss	1 1 1	-	1 -		<b>—</b> "	+ - +	$\dashv$	$-\Box$		+	$\rightarrow$	$\rightarrow$	_			+	$\dashv$		+		$\vdash$					1					_	+	0	0.0	0	0	
Bare Ground	Bare Ground								5	7 5	5 5	5		5	6 4	4 4	3	2 4	4 3							5 5	5							17	4.5	76	1	1
Bare Ground	Bare Ground					5										4 5										5 5	5 5	5 4						9	4.3	39	1	
Boardwalk	Boardwalk			П								10	10 10	10 7			П																	5	9.4	47	1	
Boardwalk	Boardwalk											10	10 10	10 7																				5	9.4	47	1	

# APPENDIX 5 - TRANSECT 2 (SOUTH) RESULTS FOR 1988 AND 2018

APPENDIX 5 - TRANSECT 2 (SOUTH) RESULT	S EOR 1988 AND 2018																																																
TRANSECT 2 (S) 24/8/1988	QUADRAT	1 2	3	4 5	6	7 8	9	10 1	1 12	13	14 1	5 16	17	18 1	19 20	21	22 2:	3 24	25	26 27	28	29 30 3	31 32	33	34 35	36	37 :	38 39	40	41 43	2 43	44	45 4	6 47	48	49 50	51	52	53 54	55	56 57	58	59 6	1 00	lo. quadrats	S A	ve cover	Total co	over
1988 Thrift	Armeria maritima 1988		+*		+++		+-						1		-			-			1 -					100			1.0					-			+	٢	-		-	100		-	0		0	0	
2018 Thrift	Armeria maritima 2018				+	$\neg$	+						1 1		+	-	$\neg$				+					1 1					1					$\neg$	+	T T			$\neg$	+-	一十	$\neg$	0	$\neg$	0	0	-
1988 Sea Aster	Aster tripolium 1988			1	1 :	1 1		1	L		2 2	1	4	3	1			1	1	3					2 1	4	3	4 3																	20		2	40	
2018 Sea Aster	Aster tripolium 2018		+				-					1		_				-			$\overline{}$						4	1	1	3					1		3	1		+					7		2	14	
1988 Spear-leaved Orache	Atriplex hastata 1988	1	4	4 5	3	3 4	4	2 1		2	2 4	1 3	3	3	$\neg$	$\leftarrow$	3 2	3	4	4 4	4	4 1			-	-						П	_	$\overline{}$		-	$\overline{}$	$\overline{}$		-	-	+	$\leftarrow$	-	25	-	3	77	
2018 Spear-leaved Orache	Atriplex hastata 2018				+++	_	+					1	1		+	CΤ		1								1 1				1	1	1				$\neg$	+	-			$\neg$	+-	$\vdash$	$\neg$	3	$\neg$	1	3	
1988 Creeping Thistle	Cirsium arvense 1988				+	_						_					_														_						+				-	+	=	-	0		0	0	
2018 Creening Thistle	Circium aniense 2018				_		-				_	_	1 1	_	_					_	+ +					1 1		_					_			_									0		0	0	
1988 Scurvy grass	Cochlearia sp. 1988		-		-	_	-				_	_	-	_	$\overline{}$	-	-	_	-		-		-			-	3	3 4	4		_		_	_	-	-	-	-		-	-	-	$\overline{}$	-	4		4	14	
2018 Scurvy grass	Cochlearia sp. 2018		+	-	+	-	+		_		-	_		-	+	一十	+	_			+					+	-	J -	17		+	$\Box$	_		$\vdash$	_	+	$\vdash$		1 1	-	+	一十	-	0	+	0	0	
1988 "Couch Grass"	Elytrigia sp. 1988	5 3	3	3 3	3 1	8 3						5 4	5			-		3	4	5 6	3																					-			16		4	66	
2018 "Couch Grass"	Elytrigia sp 2018		+ -		-	9	+	_	_				1	_			_	-	-	J 0	4	4		_		1 1	_	_	+		_		_	_		_				+					3	-	4	12	
1988 Sea Milkwort	Glaux maritima 1988			-	-	_	-				_			_	-	-	-	_		_	-	-				-							_			_	-	-			-	-	-	-	0	$\overline{}$	0	0	
2018 Sea Milkwort	Glaux maritima 2018		+	-	+	-	+		_		_	-	1	-	+	$\vdash$	+	_			+					+	_		+	_	_	$\vdash$	_	+	$\vdash$	_	+	$\vdash$		+	-	+	一十	-	0	+	0	0	
1988 Sea Pursiane	Halimone portulacoides 1988				+																					3			1	3 7	8 1	9	8 7	7		1 5	8	10	10 10	9	9 10	7	10	10	20		7	145	
2018 Sea Purclane	Halimone portulacoides 2018						-				_	_		_	_		_				_					+ - +		_	-		-	-	-			5 5	8	Q	9 8	4	8 4	7	5	10	12		7	82	
1988 Ininted Rush	Juncus articulatus 1988		-	-	-	_	-				_			_	-	-	$\pm$	_			-					-										, ,	+		5 0	-		+			0	$\overline{}$	0	0	
2018 Jointed Rush	Juncus articulatus 2018	-	+	-	+	+	+	-	+	$\vdash$	$\pm$	+	$\vdash$	-	+	$\vdash$	+	+	$\vdash$	$\pm$	+	$\rightarrow$	+	+	+	+	-	+	+	$\pm$	+	$\vdash$	-	+	$\vdash$	+	+	$\vdash$	$\pm$	+	+	$\vdash$	$\vdash$	+	0	-	0	0	
1988 Soft Rush	Juncus effusus 1988																																												0		0	0	
2018 Soft Rush	Juncus effusus 2018																-																												0		0	0	
1988 Saltmarsh Rush	Juncus gerardi 1988		-	-	+	-	+			4	6 4	7	5	4	1 1	5 .	4 2	3	5	А	7	8 4			3 7	8	6	7 8	9	8 5	4	3	4 3				$\overline{}$	-			-	-	-	-	30	-	5	149	4
2018 Saltmarsh Rush	Juncus gerardi 2018	-	+	-	+	+	+	-	+	+ -	<u> </u>	+	1		+	<u> </u>	+	+-	-	+	+++		+	+	-+-	+ " +		· + °	+-	- 1-3	+-			+	$\vdash$	+	+	$\vdash$	+	+	+	$\vdash$	$\vdash$	+	0	+	0	0	
1988 Sea Rush		10 9	9	10 10	0 10 3	8 6	4		4								_											3														-	=		11		8	83	
2018 Sea Rush	Juncus maritma 2018	10 3	+ -	10 10	10	-			_		_	_	1 1	_			_	_			+ +			_	2 7	9	9	9 4	4		_		_			_			_	_				-	7	_	6	44	
1988 Common Sea Lavender	Limonium vulgare 1988		_	-	+	_	-				_	_			-	-	$\pm$	_		_	_				- '	1	_	-	7				_			_	-	-			-	-	-	-	0	-	0	0	
2018 Common Sea Lavender	Limonium vulgare 2018	_	+	-	+	-	+		_	-	_	-	-	_	+	-	+	_	$\vdash$	_	+			_	_	+	_	_	+	_	_		_	-	-	-	+	$\vdash$	_	-	+	+	$\vdash$	+	0	+	0	0	
1988 Parsley Water Dropwort	Oenanthe lachenalii 1988			_	$\pm$	_	$\rightarrow$					_	-		$\rightarrow$		$\pm$							_		$\rightarrow$	_										+				$\rightarrow$	+		$\rightarrow$	0	$\rightarrow$	0	0	
2018 Parsley Water Dropwort	Oenanthe lachenalii 2018		_		_	_	+	_	_		_	_	1 1	_			_	_			+ +			_		1 1	_	_					_			_				_				-	0	-	0	0	
1988 Common Reed	Phragmites australis 1988	e 0	-	E 4	3 :	1	-		_		1 3	. 2	1	4	6 8		0 0	0		8 6	-	6 4			3 5	5	2	3 3	-	6 6	7		6 0	. 7	7	0 6	+		_	_	-	+	$\leftarrow$	_	42	-	5	225	
2018 Common Reed	Phragmites australis 2018	10 10		10 10	0 10	10 10	0 10	10 10	0 10	10	10 1	0 10	10	10 1	0 10	10	10 1/	0 10	10	10 10	10	10 10 1	10	-	2 E	4	4	E 0	6		8		0 1	0 10	10	7 6	7	ri-	7 4	-	4 2	-	4	-	57		8	469	
1988 Sea Plantain	Plantago maritima 1988	10 10	, 10	10 10	10 1	10 10	, 10	10 10	0 10	10	10 1	0 10	10	10 1	0 10	10	-U IC	0 10	10	10 10	10	10 10 1			3 J	3	c	5 6	- C	, ,		0	9 1	0 10	10	/ 3	+	٠	/ 4			÷		_	6	_	5	29	
2018 Sea Plantain	Plantago maritima 2018	_	+ -		+	_	+				_		1 1	_	_		_	_	$\vdash$		_			_		1 3	-	3 0	-		_		_	_	_	_	-				-	_		-	0	_	0	0	
1988 Saltmarsh Grass	Puccinellia maritima (probably) 198	00	-	-	_	_	-		_		_	_	-	_	-	-	_	_	-	_	-			_	1	4	3	_	-		_			_			-	-		_	-	+	-	-	3	_	3	8	
2018 Saltmarsh Grass	Puccinellia maritima (probably) 201	0	+	-	+	-	+		_	$\vdash$	-	_	+	_	+	-	+	_	$\vdash$	-	+		-	-	-	+-	-	-	+		_	$\vdash$	_	+	$\vdash$	_	+		c c	+	-	+	$\vdash$	+	4	+	3	13	
1988 Common Fleabane	Pulicaris dysenterica 1988			_	$\pm$	_	$\rightarrow$					_			$\rightarrow$		$\rightarrow$																				+	_	, ,		÷	+	$\vdash$	$\rightarrow$	0	_	0	0	
2018 Common Fleahane	Pulicaris dysenterica 1988  Pulicaris dysenterica 2018	_	+ - 1		_	_	+	_	_	-	_	_	+ +	_			_	_	-	_	+ +			_	_	+ +	_	_	_	_	_		_	_		_	-		_	+-+				-	0	_	0	0	
1988 Glasswort	Salicornia sp. 1988		-		+	_	+		_		_	_	-	_	-	-	一		-	_	1					-	_	_	-		_		_		-	_	+	-	_	_	-	+	$\leftarrow$	_	1	_	1	1	
2018 Glasswort	Salicornia sp. 1988		+ +	-	+-	-	+		_		_	_	1 1	-	+	$\vdash$	+	-		_	+ -					+ +	-	_	_		-	$\vdash$	_	_	$\vdash$	_	+	-+		+ +	-	+	+	-	0	-	0	0	
1988 Perennial Sow Thistle	Sonchus arvensis 1988		_	_	$\pm$	_	$\rightarrow$					_	-		$\rightarrow$		$\rightarrow$			_							_		_								+	=			$\rightarrow$	+	$\rightarrow$	$\rightarrow$	0	$\rightarrow$	0	0	
2019 Personal Sow Thirtle	Sonchus arvensis 2018	_	+	-	+	_	+				_		_	_	_	-	_	_	-		_			_		+ +	_	_			_		_	_	-	_	-	-			-	_	-	-	0		0	0	
1988 Cord Grass	Spartina anglica 1988		_	- 5	3	- 8	3 10	10 9	10	9	8 9	. 3	4	5	6 5	4	3	_	3	_	_					_		_	_	3	3		4 5	7	7	8 6		4	A A	4	4 5	7	3	3	36	-	6	199	
2018 Cord Grass	Spartina anglica 2018		+		+ $$	Ť	+*+	10 3	10	ľ	-	-	-	-	44	<del>i -</del>	<u>+</u>	_			+			-	_	+	-+	_		-	-	$\vdash$	7 -	+	+ +	<u> </u>	+	Ť	7 7	+*+	+-	+	一十	-	0	+-	0	0	
1988 Greater Sea Spurrey	Spergularia media 1988			_	$\pm$	_	$\rightarrow$					_			$\rightarrow$		_				3																+	=			$\rightarrow$	+	$\rightarrow$	$\pm$	1	_	3	3	
2018 Greater Sea Spurrey	Spergularia media 2018																-				1																		1	1	A A				4		3	10	
1988 Annual Seablite	Suaeda maritima 1988				+	_	$\overline{}$								-		-									1										1 1	$\blacksquare$	-	*			-		_	3	-	1	3	
2018 Annual Seablite	Suaeda maritima 2018		+	-	++	+	+		+	$\vdash$	_	+	+	-	+	$\vdash$	+	+	$\vdash$	+	+	+	+	+	+	+ + +	+		+		+	$\vdash$		+	$\vdash$		+	$\vdash$	_	++	+	+	$\vdash$	+	0	+-	0	0	
1988 Sea Arrow Grass	Triglochin maritma 1988			$\pm$	+	$\pm$	$\rightarrow$	3	2	1			5	5	+	$\rightarrow$	3		3	A C	5	4 5			3 3	4	3		4	4								$\rightarrow$			$\pm$			$\pm$	17		4	64	
2018 Sea Arrow Grass	Triglochin maritma 2018						_	3		1			,	_			-		3	7 3	1	7 3			1 4	4	3	4 7	5	4 2							3	2							11		4	40	
1988 "Broad-leaved grass" e.g Creepin	Ren "Broad-leaved grass" e g Creening	4 3	4	5 4	3	_	$\rightarrow$							4	3		$\pm$		4						- 4		7	4	3	3											-	-	$\leftarrow$	_	12	-	4	48	
2018 "Broad-leaved grass" e.g Creepin						+	+		+	$\vdash$	+	+	+		4	$\vdash$	+	+	+++	9	3	3	+	+	-	+	-	-	+	-	+	$\vdash$		+	$\vdash$	_	+	$\vdash$	_	+	+	+	$\vdash$	+	3	+-	3	9	
1988 "Fine-leaved grass" e.g. Velvet Be					1010	$\pm$	$\rightarrow$								+	=	+			3	3	-															+	$\rightarrow$			+	-		$\pm$	0	+	0	0	
2018 "Fine-leaved grass" e.g. Velvet Be	nt (Ag "Fine-leaved grass" e.g. Velvet Bent	t (Agrocti	canina)	2018													-								4 0	6	4	3 5	5	9 1/	0 10	10	9				1	-							13	_	7	85	
1988 Moss	Moss 1988	· (Agrosti:	- carmid)	1010	-	_	$\rightarrow$								-	-	-								- 9	0	*	_ 3	3	J 10	10	10	,				+	-			-	-	-	_	0	-	0	0	
2018 Moss	Moss 2018		+	+	++	+	+			$\vdash$	+	+-	+	-	+	$\vdash$	+	+	+	+	+	$\rightarrow$	+	$\vdash$		+	-		+		+	$\vdash$		+	$\vdash$	_	+	$\vdash$		+	+	+	$\vdash$	+	0	+-	0	0	
1988 Unidentifed grass	Unidentifed grass 1988				+	_	$\rightarrow$																														+				_			$\pm$	0	$\rightarrow$	0	0	
2018 Unidentified grass	Unidentifed grass 2018						_										-																												0		0	0	
1988 Unidentified plant	Unidentified plant 1988		+	-	+	_	+					_	-	_	_	-	$\pm$			_	+					+											-	-		_	-	-	-	-	0	_	0	0	
2018 Unidentified plant	Unidentified plant 1988 Unidentified plant 2018	-	+	+	++	+	+	-	+	$\vdash$	+	+	+	-	+	-	+	+	$\vdash$	+	+	+	+	+	+	+	$\rightarrow$	+	+	_	+-	$\vdash$	+	+	$\vdash$	+	+	$\vdash$		+	+	+	$\vdash$	+	0	+-	0	0	
1988 Bare Ground	Bare Ground 1988			$\rightarrow$	+			5 6		6	3 5	. 7	4	с .	7 C	С	5 4	2	4	4 3	4	2 2			_	2		3					-	5 5	С	2 6	4	=		5	1 2	-	$\rightarrow$	+	34	$\rightarrow$		153	
2018 Bare Ground	Bare Ground 2018					- 3		, 0		.0	7 3	+	-	,	- 3		- 4	3	-	7 3	1	J 3				3		3					3	, ,	,		5		-	0	E 0	10		c .	9	_	7	63	
																																				0 8	-		ь	9	2 3	10		-	9		- /		
1000 Poardwalk	Poardwalk 1000		$\overline{}$	-	$\top$		$\neg$															0 4	10 10	10	10	-								- 1 - 1								т.	-		-	$\overline{}$	10		
1988 Boardwalk 2018 Boardwalk	Boardwalk 1988 Boardwalk 2018		$\blacksquare$	#	$\mp$	$\mp$	+		-	$\vdash$	-	+	$\vdash$	-	+	$\vdash$	+	+-	$\vdash$		+	8 1	10 10	10	10	Н		+				$\vdash$	_	+	$\vdash$	_	+	ч	+	Н	Ŧ	H	$\dashv$	Ŧ	5	丰	10 10	48	

Appendix 6 - Taxa with changes in number of quadrats recorded in of 10% or more between 1988 and 2018 (transects 1 and 2 combined)

			TOTALS	S (BOTH TRAN	ISECTS)	CHANGE 1	988 - 2018
					Total		Total
			quad	drats	cover	quadrats	cover
				as % of			
			number	total			
1988	Sea Aster	Aster tripolium	31	28%	72		
2018	Sea Aster	Aster tripolium	24	22%	65	-23%	-10%
1988	Spear-leaved Orache	Atriplex hastata	26	24%	82		
2018	Spear-leaved Orache	Atriplex hastata	3	3%	3	-88%	-96%
1988	Scurvy grass	Cochlearia sp.	14	13%	39		
2018	Scurvy grass	Cochlearia sp.	8	7%	30	-43%	-23%
1988	"Couch Grass"	Elytrigia sp	17	15%	69		
2018	"Couch Grass"	Elytrigia sp	8	7%	34	-53%	-51%
1988	Sea Milkwort	Glaux maritima	2	2%	8		
2018	Sea Milkwort	Glaux maritima	6	5%	23	200%	188%
1988	Sea Purslane	Halimone portulacoides	32	29%	228		
2018	Sea Purslane	Halimone portulacoides	17	15%	103	-47%	-55%
1988	Saltmarsh Rush	Juncus gerardi	46	42%	231		
2018	Saltmarsh Rush	Juncus gerardi	30	27%	202	-35%	-13%
1988	Sea Rush	Juncus maritma	15	14%	97		
2018	Sea Rush	Juncus maritma	24	22%	153	60%	58%
1988	Common Sea Lavender	Limonium vulgare	9	8%	34		
2018	Common Sea Lavender	Limonium vulgare	19	17%	87	111%	156%
1988	Parsley Water Dropwort	Oenanthe lachenalii	15	14%	55		
2018	Parsley Water Dropwort	Oenanthe lachenalii	7	6%	11	-53%	-80%
1988	Common Reed	Phragmites australis	87	79%	435		
2018	Common Reed	Phragmites australis	99	90%	665	14%	53%
1988	Sea Plantain	Plantago maritima	14	13%	64		
2018	Sea Plantain	Plantago maritima	3	3%	6	-79%	-91%
1988	Saltmarsh Grass	Puccinellia maritima (probably)	3	3%	8		
2018	Saltmarsh Grass	Puccinellia maritima (probably)	4	4%	13	33%	63%
1988	Perennial Sow Thistle	Sonchus arvensis	10	9%	36		

2018	Perennial Sow Thistle	Sonchus arvensis	6	5%	7	-40%	-81%
1988	Cord Grass	Spartina anglica	54	49%	291		
2018	Cord Grass	Spartina anglica	12	11%	35	-78%	-88%
1988	Greater Sea Spurrey	Spergularia media	15	14%	48		
2018	Greater Sea Spurrey	Spergularia media	10	9%	28	-33%	-42%
1988	Sea Arrow Grass	Triglochin maritma	28	25%	100		
2018	Sea Arrow Grass	Triglochin maritma	32	29%	136	14%	36%
1988	"Fine-leaved grass" e.g. Velvet Bent (Agrostis canina)	"Fine-leaved grass" e.g. Velvet Bent (Agrostis canina)	14	13%	90		
2018	"Fine-leaved grass" e.g. Velvet Bent (Agrostis canina)	"Fine-leaved grass" e.g. Velvet Bent (Agrostis canina)	18	16%	98	29%	9%
1988	"Broad-leaved grass" e.g Creeping Bent (Agrostis stolonifera)	"Broad-leaved grass" e.g Creeping Bent (Agrostis stolonifera)	30	27%	143		
2018	"Broad-leaved grass" e.g Creeping Bent (Agrostis stolonifera)	"Broad-leaved grass" e.g Creeping Bent (Agrostis stolonifera)	11	10%	34	-63%	-76%
1988	Unidentifed grass	Unidentifed grass	12	11%	55		
2018	Unidentifed grass	Unidentifed grass	0	0%	0	-100%	-100%
1988	Bare Ground	Bare Ground	51	46%	229		
2018	Bare Ground	Bare Ground	18	16%	102	-65%	-55%