

HOLES BAY NATURE PARK BIRDS AND WILDLIFE REPORT 2020

The birds, wildlife and ecology of Holes Bay and
Upton Country Park.



THE GREAT HEATH LIVING LANDSCAPE HOLES BAY NATURE PARK

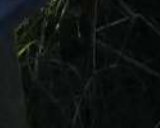
Holes Bay Nature Park is located in the heart of Poole and makes a fine contrast to the high density, urban landscape. The park is a haven for many birds and wildlife and also provides an important habitat for waterfowl. From this sign you can see the changes in the park as it grows and develops.

Welcome to Holes Bay!

This part of the park is a Site of Nature Conservation Interest. It is a Special Area of Conservation and is also a Site of Special Scientific Interest. It is a Site of Nature Conservation Interest.

A special place for birds

There are many birds in the park. The park is a special place for birds. It is a Site of Nature Conservation Interest. It is a Site of Special Scientific Interest. It is a Site of Nature Conservation Interest.



Mud of life

The mud of life is a special place for birds. It is a Site of Nature Conservation Interest. It is a Site of Special Scientific Interest. It is a Site of Nature Conservation Interest.



Welcome to the first annual Holes Bay Nature Report. Inspired by the excellent and long established Lytchett Bay report, our aim is to promote Holes Bay and the surrounding area as a haven for nature, to record and share wildlife sightings, and to encourage more records.

The recording area covers Holes Bay itself, the Creekmoor and PC World Drain, Upton Country Park and the surrounding farm fields (see map below). Records of birds overflying the recording area are also welcome.

Sightings can be shared via our Twitter account @Bayholes, or e-mailed to nick.woods4@btinternet.com

Martin Adams, Jackie and Nick Hull, Steve Smith and Nick Woods

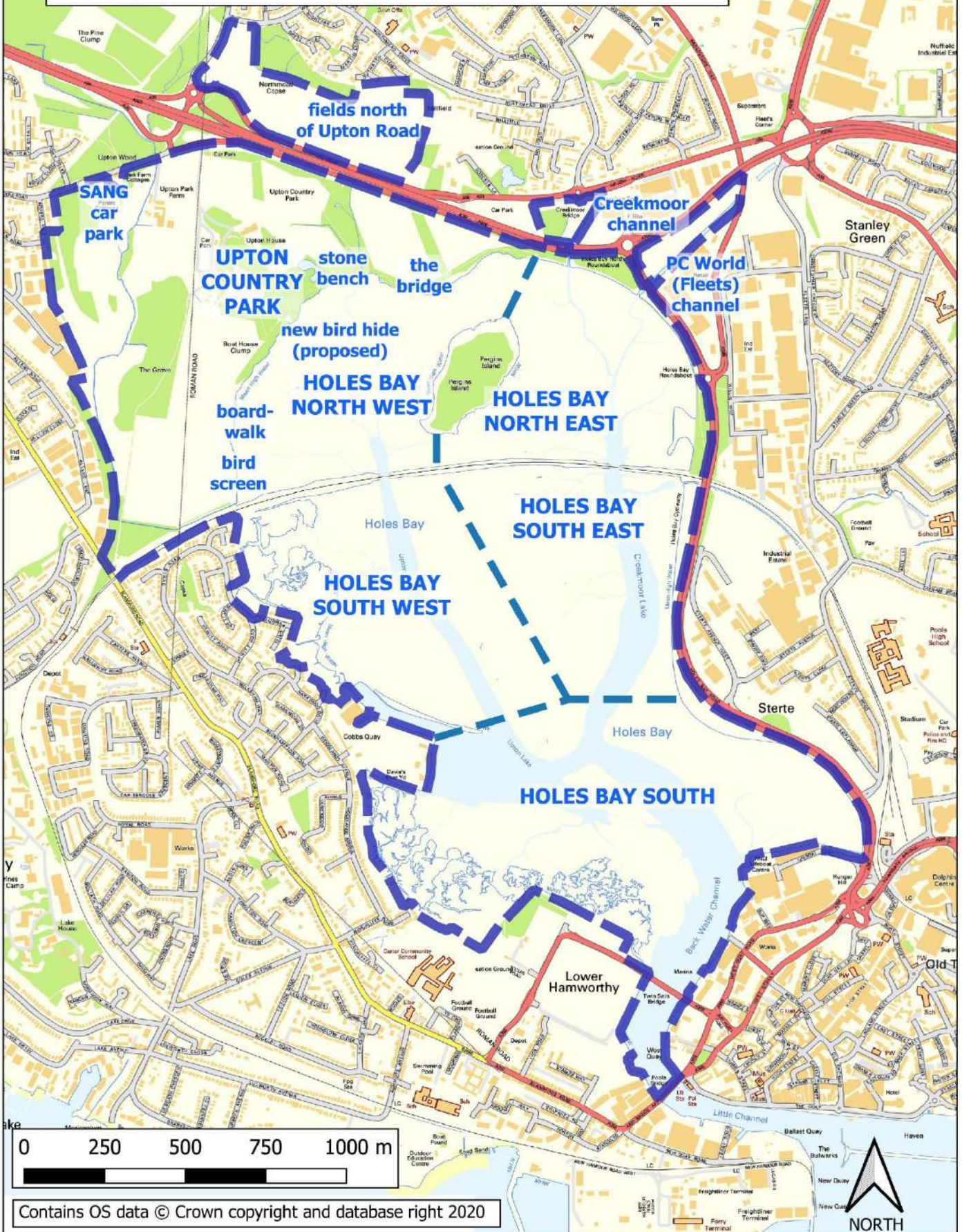
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HOLES BAY BIRD AND WILDLIFE RECORDING AREAS

The recording area includes Holes Bay, the Creekmoor and PC World (Fleets) channels and Upton Country Park. Records are welcome for the fields of Upton Park Farm, where these can be viewed from nearby open space (there is no public access to these fields). Records of birds overflying the recording area or seen nearby are also welcome. (map version 2 27/09/2020)



INTRODUCTION

Martin Adams



Holes Bay Nature Park is a haven for wildlife in an urban environment, a site where wildlife thrives despite being surrounded by human activity. We use Holes Bay and the land around it for transport, housing, retail and industry, as well as for leisure activities such as boating, cycling, fishing, dog walking, and of course birdwatching.

Despite all this, Holes Bay is a thriving and arguably improving habitat for nature. The Nature Park is a SSSI (Site of Special Scientific Interest) primarily for its importance to wintering birds, and the area north of the railway bridge is classified as a Bird Sensitive Area. However, the site's importance is rather underrated: not just by the public but even by birders. The section of the A35 that runs past The Bay is the busiest road in Poole, and many birders understandably prefer more sedate sites like Arne or Brownsea. This is a shame, because Holes Bay is equal to anywhere in Dorset in the right season in terms of birds alone, especially for sheer numbers. Besides, when you are focused just on the birds, everything else just melts away, and even the noise of all that traffic can't drown out the Curlew's cry.

Many people - incomprehensibly to birders - don't focus on the birds at all, or even notice them. A Peregrine Falcon can often be seen roosting on the concrete of the Asda building, casting a cold majestic eye over the passing pigeons, and the occasional indifferent glance at us humans. Yet the key phrase here is that it *can be seen*: Often it isn't. Most shoppers passing by below are completely unaware that they are in the presence of the fastest creature on Earth.



Peregrine (Martin Adams)

Commuters speed by in the trains rushing over the embankment that bisects the bay, yet most are blissfully unaware that when the tide & time is right they could glance up and see thousands of winter wildfowl & waders.



Wigeon flock (René Goad)



Kingfisher roosting (Mark Wright)

Drivers in the cars that grind along the busy roads around The Bay don't even have the chance of this brief view, and have no way of knowing that a Kingfisher might be roosting in the underpass beneath them. Even walkers and cyclists might not look up and see a Kingfisher flashing by, or Osprey hunting overhead as they pass by.



Kingfisher (Martin Adams)

Many people enjoying a relaxing day out in Upton Country Park will stop to enjoy the breath-taking views, and they can't help but notice the birdlife in winter. These distant views however don't always allow them to appreciate the full beauty of a close up view of a drake Teal or Wigeon, the true importance of the site to the birds, or the incredible journeys that they make to reach it.



Wigeon (Martin Adams)

The British Isles' position on the edge of the East Atlantic Flyway (a major bird migration route,) their relative warmth due to The Gulf Stream, and the amount of coastal and estuarine habitats all mean that they are of particular importance to waders and wildfowl.

Poole Harbour hosts nationally and internationally important numbers of wintering birds. 25,000 birds winter in Poole Harbour, and more pass through on the way to their wintering grounds. These birds come from as far afield as Russia, Scandinavian, Continental Europe, Northern & Eastern Britain, Iceland and even the high arctic of Greenland and Canada.

To give one example, on September 28th there were 1290 Black-tailed Godwit in Holes Bay. The Black-tailed Godwit (or Blackwit) that over-winter in Britain are Icelandic breeding birds, so they have travelled a distance of over 1100 miles to feed on the mud of Holes Bay. However, some of these birds are just passing through on an even longer journey to Southern Europe or Africa.



Black-tailed Godwit (Martin Adams)

The total population of the *islandica* race of Black-tailed Godwit is estimated at 75,000, so over 1000 in one place is a significant proportion of the world population. Indeed, over 1% of the population counts as an internationally important number.

Black-tailed Godwit numbers, and bird numbers on Holes Bay generally have increased, although some species have experienced declines. Pochard, for example, were once an important bird with a max count of over 100 in the 1980's, but they were sadly only recorded once on Holes Bay in 2020.

As birds exist above and beyond our border, these dramatic changes are partly due to factors in their breeding grounds, or to global changes. Global warming has resulted in an expansion of the range of the *icelandica* race of Blackwit, although the species in general is in decline. Pochard numbers have declined in Eastern Europe and Russia for reasons including predation by invasive mink and the abandonment of freshwater fish farms.

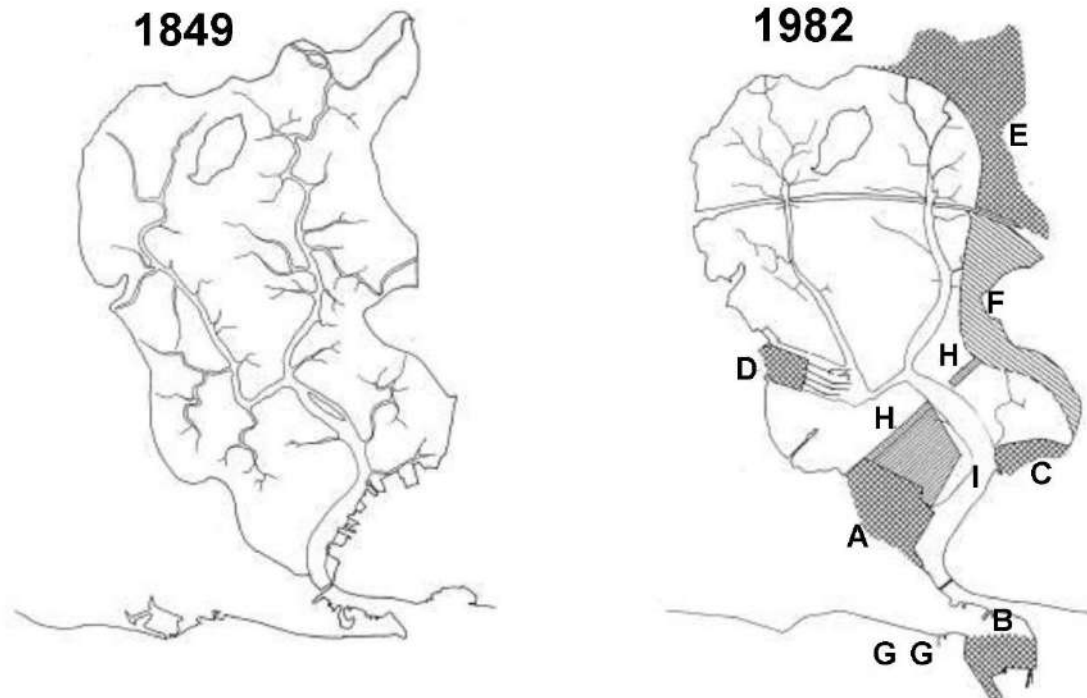
This shows the connected nature of our world: ice melts in Iceland, land use changes in Russia and it affects what birds we get in Dorset. It is also why it is important to monitor and record the birds we get. They are important in themselves, but they are also a sign that the world - their world and ours - is changing.



On a more local level, why has Holes Bay seemingly become more attractive recently? The 2017 report Holes Bay Nature Park: Ecology & Human Activity, prepared by the Dorset Wildlife Trust, paints an interesting picture.

The history of the Bay over the last 200 years is a history of development and pollution. Although there has been a marked turn around more recently, there are still considerable ecological challenges.

Holes Bay has shrunk by about a third since 1893 when The Railway Embankment cut The Bay in two. The Power Station in 1946, Cobb's Quay in 1960, and The Holes Bay Relief Road in 1988 have all resulted in parts of The Bay being infilled.



*Infilling from 1849 to 1982 (areas H & I were proposed changes that never emerged.)
From Holes Bay Nature Park: Ecology & Human Activity.*

Furthermore, Holes Bay was long considered the most polluted part of Poole Harbour. Industrial waste, including heavy metals like Mercury, Cadmium, Zinc, Silver, Lead and Copper found its way into the Bay, and it has also been used as a dumping ground for scrap boats. Raw sewage was pumped into The Bay until as late as the 1960s. Tributyltin (TBT) was anti-fouling paint that was banned in the 80's after it was found to be toxic to marine life. It was found to still be present in 2018.



Because of the narrow entrance and shallow tides, the tidal flushing rate is very slow in Holes Bay, and many of these toxins remain present in the sediment. Shell fishing is effectively banned in Holes Bay for this reason.

Although this report focuses mainly on the birds, the marine life is equally important - not least to the birds themselves. The food chain of plant life, invertebrates and fish is vital to the birds, and a rich and important ecosystem in itself. Both native species of Seahorse have been recorded under The Bay, for example. Holes Bay is also a nursery for 11 commercially important species of fish. The marine life is relatively unseen and understudied however. It has not been properly surveyed since the 1980's, and issues like the impact of invasive species such as the Pacific Oyster remain unknown.

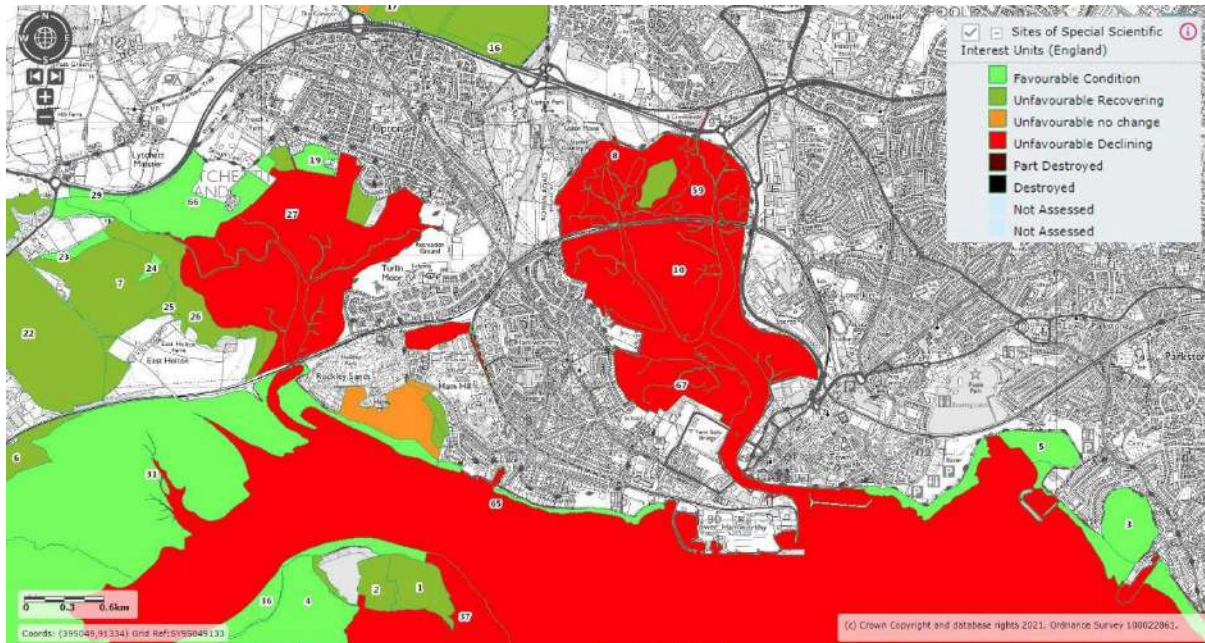


Low Tide summer in Holes Bay NE, showing extensive algal mats

The other challenge that Holes Bay continues to face is nitrogen levels, mainly from historical agricultural uses: it can take 30 years for nitrates to seep through the water course. Excessive nitrogen levels can promote the growth of algal mats, which in turn can reduce the oxygen levels and impact the plant and fish populations. Anoxic conditions can also lead to outbreaks of botulism.

The saltmarsh around the Bay has been massively eroded over the course of the twentieth century. About 70% was lost to erosion and infilling between 1924-1994, with the decline continuing since. Saltmarsh is a rare and declining habitat, and is important as a carbon store. Its erosion has also made the railway embankment vulnerable to the elements itself, and a restoration project has been mooted. So far, nothing has come of it however, which is a shame, as the Curlew and Redshank (both birds of conservation concern) seem to particularly favour the remaining salt marsh.

All of this, along with the twin menaces of litter and dog mess, and issues like disturbance and bait digging, make Hole Bay sounds like an ecological disaster area.



2017/2020 SSSI Condition Assessment of Holes Bay and adjacent areas by Natural England (<https://magic.defra.gov.uk/MagicMap.aspx> accessed on 3rd February 2021)

The bird numbers seem to tell a brighter story however. Apart from setting the paths back at Upton Country Park, there haven't been any active conservation interventions. Indeed, Holes Bay is really only a Nature Park in name only, and it doesn't even have the legal classification of Local Nature Reserve. The only real changes that have been made are to simply stop polluting and encroaching on the Bay.



Wigeon (Mark Wright)

The erosion of the Saltmarsh also seems to have had a positive effect in some ways. It was dominated by *Spartina* grass, a non-native invasive species (which you can read more about in more detail below.)

The loss of saltmarsh has meant a gain in intertidal mudflats, another rare and declining habitat nationally and globally, and this seems to have benefited the birdlife.



Holes Bay is used as both a roost and a feeding area for birds. It is the warmest part of Poole Harbour, with so many streams feeding into it, it is relatively sheltered, and it offers the birds 360 views - crucial for them to spot potential predators. Further erosion though, and rising sea levels, could potentially mean those roosts are lost and The Bay would become a less attractive habitat.

For now however, we are blessed with an extraordinary habitat. As the wildlife is habituated to people it allows for extraordinarily close views of birds that would usually bolt at the first sign of human activity, making Holes Bay a place where nature thrives close to us, whilst also allowing us to get closer to nature.



Avocet (Martin Adams)

UPTON COUNTRY PARK

Upton Country Park is less glamorous and spectacular as a habitat. It isn't "important" in the way that Holes Bay is, because it isn't a rare or threatened habitat. All our greenspaces are precious however, and our green space is under pressure.

The stories of the common woodland species we see all year round, and perhaps take for granted, are also no less remarkable than those of the waders and wildfowl we think of as long haul travellers.



Robin and Goldcrest (Martin Adams)

For example, Europe's smallest bird, the Goldcrest (as well as its less common cousin the Firecrest) are both resident and mostly likely breed in Upton Country Park, but their numbers are boosted by winter visitors from continental Europe and Scandinavia. The tiny Goldcrest you see hyperactively flitting around the bushes in the winter has possibly flown across the North Sea to get there. This tiny ball of feathers that weighs about as much as a 5p piece is tougher than it looks!

Numbers of the nation's favourite bird, the Robin, are also boosted by (mainly) Scandinavian winter migrants, and a winter Blackbird might be a Continental bird or a resident, or even a short haul migrant from elsewhere in Britain - possibly displaced from its breeding grounds by winter visitors. Large flocks of another migrant thrush, the Redwing can also be seen in winter, and mixed flocks of Tits and Finches forage together. These flocks can be truly international in character, with British birds mixed with birds from all over Europe.



Lesser Redpoll and Spotted Flycatcher (Martin Adams)

In summer, migrant Reed Warblers join the resident Cetti's Warblers in the reed beds, and migrants from Africa such as Blackcap and Chiffchaff join the resident woodland birds. As the climate changes, Chiffchaff and especially Blackcap are increasingly seen all year round, but in another twist in the complicated story of migration, the winter visitors are different birds to the summer breeders. Some European Blackcap have started to migrate north-east from Central and Southern Europe, while our breeding population migrate south - some less far south than the birds that winter in Britain!

Birds such as Wheatear, Spotted Flycatcher and Willow Warblers also pass through in the spring and autumn. Another part of our recording area, The PC World Drain has a great reputation for passage migrants. The main view point is through the chain link fence in the car park opposite KFC, so it's not the most glamorous of birding locations!



As well as being important to the wildlife, greenspaces are also of course important for us. Apart from the obvious physical health benefits of exercising outside, there are proven mental health benefits to being outside and connecting with nature.

2020's Lockdowns and restrictions made it harder for us to connect with each other, but one positive side effect was it helped us connect with nature. Enforced time off, Social distancing, restrictions on indoor activities and travel made connecting with the natural world not just more possible, but more necessary. Even those who were already nature nerds found themselves forced to stay more local, and urban sites like Holes Bay are ideally placed for this.

Whatever the future brings, it is important that we maintain that connection and communicate the importance of our natural heritage, for our sake and for the sake of nature.

It is important, also, to have a respect for the nature and the habitat that we are enjoying. Much of the expanded Upton Country Park site is a SANG (Suitable Alternative Natural Greenspace,) designed to take pressure off Dorset's precious Heathland. This does inevitably put pressure on the site, with litter, vandalism, and dog mess particular problems. People and dogs encroaching on the bay, trampling the reed beds and causing disturbance to the birds, are also a problem.

We are sadly one of the most nature depleted countries in the world. We are also as a people, and a species, nature deprived; living our lives in towns: indoors and increasingly online. We share our country, our world, our home with a fantastic array of wildlife, yet so many of us are unaware of the riches on our doorsteps.

Urban sites like Holes Bay and Upton Country Park are vital to maintaining and promoting our connection with nature. Hopefully this report can help in some small way. In 2020 Upton Country Park secured lottery funding for their Discovery Project to promote the history of the site, whilst also including schemes to record, report and promote the nature and natural history. As part of this project, there is also funding to build a new hide on the site of the hide that was burned down in 2013.

<https://uptoncountrypark.com/discovery-project/happening-now/>



Nuthatch (Martin Adams)

The idea for this report only came into being over half way through the year, so it is very much at the fledgling stage! Hopefully, to mix metaphors slightly, from little acorns...

Future reports could well expand to include records and articles on more aspects of the Nature Park: the flora, fungi, reptiles, and invertebrates such as Dragonflies and Butterflies.



Red Admiral (Andy Collyer)

For now, we hope you enjoy the report!



Selected Bibliography

The main source for the ecology of The Bay was the following report: Holes Bay Nature Park: Ecology & Human Activity. Emma Rance, Douglas Taylor, Beverley Lagden & Brian Blesse (DWT 2017)

Our thanks to Hamish Murray of Dorset Wildlife Trust for providing a copy and facilitating permission to reproduce selected illustrations.

General books on Birds referred to:

Time to Fly by Jim Flegg.

An indispensable guide on the migration of commonly occurring British Birds; a rare book that is both a great read and an essential reference guide

<https://www.bto.org/our-science/publications/bto-books-and-guides/time-fly>

Waders of Europe by Lars Gejl

Beautifully presented and comprehensive guide to subject.

RSPB Handbook of Birds by Peter Holden & Richard Gregory

A good one stop shop for bird behaviour, populations, breeding and conservation status.

Catching the Bug – A Sound Approach guide to the birds of Poole Harbour by Mark Constantine, Nick Hopper and the Sound Approach (The Sound Approach 2012)

An excellent account of the birds of the area, including two CDs of the songs and calls of local birds.

Web links.

<https://wadertales.wordpress.com/2015/12/18/black-tailed-godwits-expand-their-range-in-russia-and-iceland/>



Black-tailed Godwit (Andy Collyer)

Birds recorded in Holes Bay **and Upton Country Park in 2020**

The following list of birds includes all those species known to have occurred in the recording area in 2020.

A map showing the extent of the recording area is included in the introduction to this report. The names used for particular areas within Upton Country Park are shown on the map below

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:

Martin Adams, Michael Ball, Ian Ballam, Jake Blade, Tom Carly, Alex Coggins, Andy Collyer, Alison Copland, Peter Corbin, Ann Crawford, Jason Fathers, David Foster, Frankie Gamble, Rene Goad, Seb Haggett, Paul Harvey, Garry Hayman, Nicky Hoar, Jackie Hull, Nick Hull, Axel Kirby, Geoffrey Langrish-Dixon, Paul Levey, Samuel Levey, Ian Lewis, John Lockwood, Jez Martin, Brittany Maxted, Garry Moors, Paul Morton, Dave Price, Andy Renton, Shaun Robson, Steve Smith, John Sullivan, Jan Toomer, Geoff Upton, Peter Vandeputte, Clinton Whale, Martin Whitchurch, Martin Wood, Liz Woodford, Nick Woods.

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

Martin Adams, Ian Ballam, Birds of Poole Harbour (Paul Morton), Andy Collyer, Rene Goad, Tanya Hart, Fiona Liddiard, Shaun Robson, Nick Woods, Mark Wright.

The authors would like to thank all the observers and photographers who have contributed. Please accept our apologies for any errors or omissions.

The authors would also like to thank the following people for assistance: Jez Martin (Bournemouth, Christchurch and Poole Council), Paul Morton (Birds of Poole Harbour), Hamish Murray (Dorset WildlifeTrust), Jennie Saunders (Bournemouth, Christchurch and Poole Council/Upton Country Park).



UPTON COUNTRY PARK

Field names and other names used by bird watchers and others for particular areas or features within the Park.

Imagery ©2019 Google, Imagery ©2019 Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, Map data ©2019

Brent Goose (*Branta bernicla*)

The scarcer of the two ‘black geese’ regularly recorded – small numbers occasionally recorded in Holes Bay.

Holes Bay south of the railway line - 12 on 27th, 10 on 29th and 3 on 30th December 2020.

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).

Recorded in all months of the year. At times large numbers were seen grazing on the salt marsh in Holes Bay (maximum c 150 on 22nd June 2020) or in thirteen acre field on at Upton Park Farm (maximum 134 on 22nd December 2020).

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
16* (19 th)	present	4 (23 rd)	present	114 (31 st)	276 (29 th)	235 (4 th)	100 (30 th)	c100 (25 th)	204 (13 th)	92 (2 nd)	137 (22 nd)

Combined Holes Bay counts by WeBS counters shown by

Greylag Goose (*Anser anser*)

The only ‘grey goose’ regularly recorded, the birds 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 Pooleparkgreylags@gmail.com)

At least 8 records in April, June, July and September-December of 1-3 birds; often with Canada Geese in Holes Bay.

Mute Swan (*Cygnus olor*)

At least two pairs successfully bred, one with 4 young noted around the Creekmoor channel outlet on several dates and one pair, also with 4 young, frequenting the area in front of the stone bench. A nest with one unhatched egg was abandoned near the mouth of the PC World channel in early May and birds may also have bred in other areas around the Bay. Larger numbers of bird present in autumn/winter.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
29* (19 th)	30 (8 th)	25 (8 th)	16 (12 th)	11 (31 st)	35 (29 th)	41 (28 th)	47 (9 th)	50 (27 th)	60 (29 th)	67 (7 th)	104* (6 th)

Combined Holes Bay counts by WeBS counters shown by *

Egyptian Goose (*Alopochen aegyptiaca*)

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

Single birds in Holes Bay NW on 7th April 2020 and 11th October 2020.

Shelduck (*Tadorna tadorna*)

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

Recorded in all months except August and September (when birds are likely to be away moulting); monthly maxima given below. A single juvenile was seen on 5th July 2020 in Holes Bay NW, suggesting a pair may have bred locally, although this is fewer young than are sometimes seen.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
218*	133*	75*	48	40	32	14	-	-	15 th	65*	130*
(19 th)	(23 rd)	(8 th)	(17 th)	(5 th)	(14 th)	(4 th)			(7 th)	(24 th)	(13 th)

Combined Holes Bay counts by WeBS counters shown by *



Shelduck (Rene Goad)

Shoveler (*Spatula clypeata*)

A regular winter visitor to Holes Bay with numbers increasing - in recent years counts of 50+ have been recorded; sometimes uses the duck pond at Upton Country Park.

Regularly present in Holes Bay from 1st January to 11th April 2020, with 3 on 26th May and then from 26th August to the end of the year.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
89	84	28	5	3	-	-	2	12	40	87*	130
(2 nd)	(10 th)	(18 th)	(4 th)	(26 th)			(26 th)	(30 th)	(19 th)	(22 nd)	(23 rd)

Combined Holes Bay counts by WeBS counters shown by *

Gadwall (*Mareca strepera*)

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

Small numbers recorded in Holes Bay in all months except July 2020, monthly maxima shown below. The two birds present in the spring were an apparent pair.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8 (6 th)	6 (3 rd)	2 (14 th)	2 (17 th)	2 (7 th)	2 (1 st)	-	4 (17 th)	1 (13 th)	3 (11 th)	6* (22 nd)	7 (29 th)

Combined Holes Bay counts by WeBS counters shown by *



Left to right: male Teal, male Gadwall, male Shoveler (Rene Goad)

Wigeon (*Mareca penelope*)

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

Winter numbers large with the January WeBS total of 2094 birds for all sectors of Holes Bay possibly a record count. Larger counts generally from the northern sections of the Bay. A pair was present until 14th April and the last spring bird seen on 6th May 2020. The first returning bird was a female seen on 11th July 2020, some weeks before numbers really began to build up.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2094* (19 th)	c1000 (8 th)	117 (22 nd)	116 (2 nd)	1 (6 th)	-	1 (11 th)	4 (18 th)	585* (27 th)	1057 (17 th)	1818* (22 nd)	1702* (13 th)

Combined Holes Bay counts by WeBS counters shown by *



Left: male Wigeon, right: female Wigeon (Mark Wright)

A probable female Wigeon x Pintail hybrid was reported with the Wigeon flock in Holes Bay on 5th February 2020.

Mallard (*Anas platyrhynchos*)

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

Present all year. Breeding birds were reported from the PC World channel (7 ducklings on 26th May 2020), the Grove pond (2 ducklings on 9th June 2020) and the duck pond at Upton Country Park. Some records refer to ‘hybrids’ and a domestic variety (believed to be a Swedish Blue Duck, possibly crossed with a Mallard), bred on the duck pond. Domestic birds often appear on the duck pond in the Park and Mallard numbers build up if there is heavy feeding. Numbers decrease however, if the pond dries up as it did this year. It is likely that breeding birds were under-recorded and hybrid birds may also have not been recorded by some observers. For these reasons it is possible that the monthly maxima given below may be low.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
12 (19 th)	20* (23 rd)	14* (8 th)	7 (24 th)	30 (31 st)	50 (14 th)	44 (25 th)	67 (9 th)	10 (4 th)	23 (7 th)	c20 (7 th)	18 (22 nd)

Combined Holes Bay counts by WeBS counters shown by *



Left: Swedish Blue Duck and ducklings, right Mallard and ducklings (Nick Woods)

Pintail (*Anas acuta*)

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

Recorded in Holes Bay from 1st January to 23rd March 2020 and 6th September to 26th December 2020.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
38 (1 st)	32 (2 nd)	2 (23 rd)	9 (21 st)	-	-	-	-	-	15 (28 th)	31 (30)	50* (13 th)

Combined Holes Bay counts by WeBS counters shown by *



Male Pintail with Teal (Mark Wright)

Teal (*Anas crecca*)

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

Recorded from 1st January to 27th April 2020 (when a male and female were still present), and from 26th June till the end of the year, with maximum of 603 in January 2020.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
603*	350	84	75	-	1	8	83	103*	211	387*	275
(19 th)	(8 th)	(15 th)	(2 nd)		(22 nd)	(19 th)	(27 th)	(27 th)	(13 th)	(22 nd)	(22 nd)

Combined Holes Bay counts by WeBS counters shown by *

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.

A single record of this once much more common winter visitor – 1 on 6th February 2020.

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’.

One to three birds recorded in Holes Bay on 6 dates in January 2020 with 2 on 31st May 2020. A similar number of records to 2019, despite the much increased recording effort in 2020.

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 21st January to 29th 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.



Female and male Scaup (Rene Goad 24th January 2020)

Goldeneye (*Bucephala clangula*)

A regular winter visitor in small numbers to Holes Bay.

Up to 3 birds recorded from 1st January to 23rd February 2020 and 1 to 4 birds recorded 13th to 31st December 2020.

Red-breasted Merganser (*Mergus serrator*)

Regular winter visitor in small numbers to Holes Bay.

Low numbers recorded in the winter months; birds most frequently seen south of the railway line over Holes Bay.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6 (1 st)	19* (23 rd)	6 (8 th)	-	-	-	-	-	-	-	-	2 (27 th)

Combined Holes Bay counts by WeBS counters shown by *

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 18th May to 16th August 2020, though maximum number recorded was only 6 on 31st May 2020. Possibly under-recorded.

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.

Usually present in the urban areas where breeding probably occurs maximum number recorded 40 on 14th May 2020. 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.

Recorded in most months of the year. The largest count recorded was 6 in Upton Country Park on 25th October 2020, but probably overlooked amongst much commoner Wood Pigeon.

Singing birds frequent and widespread in the woods and gardens of the Park, but no conclusive evidence of breeding.



Left: Stock Dove, right Wood Pigeon (Nick Woods)

Wood Pigeon (*Columba palumbus*)

A common breeding species, the Wood Pigeon also forms feeding flocks, often seen in the fields at Upton Country Park and migrating flocks.

Always present at Upton Country Park with fledged young seen on 4th July 2020; almost certainly bred in the Park but no indication of numbers. Flocks of 50 or more included 61 on 19th January, 70 on 25th September, 50+ on 17th & 100+ on 25th October and 50+ flying to roost on Pergins Island on 20th December 2020 (with total roost numbers probably being much greater).

Collared Dove (*Streptopelia decaocto*)

Small numbers seen around the recording area, may breed.

Relatively few records, but recorded in January-April, August-September and November-December, mainly along the shoreline and on the west side of the SANG, with a maximum of 6 recorded on 19th January 2020. No evidence of breeding.

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.

Recorded in all months of the year, mainly from the main reed beds around Holes Bay, although birds also heard from the Grove pond and the duck pond in Upton Country Park. Maximum number 3 on 22nd December 2020. 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 a number of the ponds at Upton Country Park.

Recorded in Upton Country Park or around the Bay in all months of the year. Breeding birds were reported from the PC World channel (1 young bird with adult on 26th May 2020), the Grove

pond (2 young birds on 9th June 2020) and in front of the stone bench (2 young birds on 27th August 2020) and birds may have bred at other sites around the Bay. Maximum number recorded was 9 from Holes Bay NE on 25th October 2020.

Coot (*Fulica atra*)

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

A single bird in Holes Bay on 1st January and 3 in Holes Bay SW on 19th January 2020

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, usually seen close to the railway in Holes Bay.

Maximum monthly counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
11* (19 th)	11* (23 rd)	4 (2 nd)	1 (1 st)	-	-	-	3 (30 th)	3 (16 th)	2 (11 th)	9 (24 th)	8 (30 th)

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.

A few (usually less than 10) birds present in Holes Bay (often south of the railway but sometimes venturing to the north part of the bay) January to the end of July and again from October to December, maximum 13 on 23rd February 2020 (WeBS count total for all sectors of Holes Bay). Two birds were seen displaying on 7th April 2020.

Oystercatcher (*Haematopus ostralegus*)

Present for most of the year in small numbers in Holes Bay with counts upto 60 or more occasionally recorded; a few birds will sometimes feed in the farm fields at Upton Country Park. The wintering population in Poole Harbour is thought to have declined since 1990.

Recorded from all months of the year in Holes Bay, monthly maxima given below. Large high tide roosts sometimes assemble on the south side of the railway embankment on the east side of the Bay (e.g. 49 birds on 21st January 2020). 1-3 birds were recorded on three occasions feeding in the fields of Upton Park Farm.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
49 (21 st)	43* (23 rd)	22* (8 th)	7 (2 nd)	8 (16 th)	10 (27 th)	30 (28 th)	26* (30 th)	38 (25 th)	19 (7 th)	47* (22 nd)	84 (31 st)

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.

Large numbers in winter, mainly in northern parts of Holes Bay. Present in small numbers until 15th April 2020 with birds returning from 5th October 2020.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
299* (19 th)	200+ (5 th)	7 (2 nd)	1 (15 th)	-	-	-	-	-	73 (30 th)	159 (19 th)	253 (30 th)

Combined Holes Bay counts by WeBS counters shown by *

Lapwing (*Vanellus vanellus*)

A winter visitor to Holes Bay, often best seen from the boardwalk or bird screen and sometimes found in the fields at Upton Country Park, especially in prolonged cold spells.

Recorded on 8 dates in January-February and 15 dates in November-December (monthly maxima given below). Most records of birds in Holes Bay with two records of birds in thirteen acre field.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
15 (31 st)	4 (23 rd)	-	-	-	-	-	-	-	-	3 (21 st)	9 (7 th)

Combined Holes Bay counts by WeBS counters shown by *

Grey Plover (*Pluvialis squatarola*)

A passage migrant or winter visitor to Holes Bay, birds being reported more often in recent years and often most visible from the boardwalk in Upton Country Park.

1-3 birds recorded on 20 dates from 20th September to 13th December 2020 usually in the northern part of Holes Bay. The frequency of records (a big increase on known records from 2019) suggests the birds may have been continually present for much of this period.



Grey Plover and Dunlin (Martin Adams)

Ringed Plover (*Charadrius hiaticula*)

An occasional visitor to Holes Bay, the small flocks rarely seeming to stay long.

Two on 18th May 2020 (birds with Dunlin and flew off soon after being seen) and 10 on 24th August 2020; both records from Holes Bay NW.

Whimbrel (*Numenius phaeopus*)

A regular spring and autumn migrant seen in Holes Bay singly or in small parties.

In Holes Bay 1-5 birds on 15 dates between 12th April and 8th May 2020 and on 17 dates between 4th July and 26th August 2020.

Curlew (*Numenius arquata*)

Can be seen in Holes Bay in all months of the year with counts of 50 or more in the winter. Often seen on the saltmarsh south of the railway and the edges of Pergins Island will also feed in the fields of Upton Park Farm.

Recorded in all months of the year; monthly maxima given below. There were 12 records of birds feeding in the fields of Upton Park Farm (maximum number recorded 33 on 16th December 2020) of which all but one were of birds using thirteen acre field (16 were in Martins field to the north of the dual carriageway on 29th January 2020).

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
74*	122*	62	48	1	24	97	104	75	80	94	92*
(19 th)	(23 rd)	(17 th)	(2 nd)	(18 th)	(28 th)	(28 th)	(9 th)	(25 th)	(7 th)	(24 th)	(13 th)

Combined Holes Bay count by WeBS counters shown by *



Left: Curlew (Mark Wright), Right: Whimbrel (Rene Goad)

Bar-tailed Godwit (*Limosa lapponica*)

In Poole Harbour this species is more characteristic of the area adjacent to the Sandbanks peninsula, one to a few birds found in winter or on passage in Holes Bay but vastly outnumbered by the Black-tailed Godwit.

A single record (1 on 20th March 2020). In the autumn 2 birds on 3rd September 2020 and single birds on 14th and 25th September 2020, followed by single birds on 5th, 6th and 9th October 2020 and one bird on 24th December 2020. All records from north section of Holes Bay.

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 when counts of over 1,000 may be made; will also feed in the fields of Upton Park Farm. One of the Harbour's most important wintering birds, some have been colour ringed enabling their movements to be tracked.



Black-tailed Godwit (Andy Collyer)

Recorded in all months of the year with numbers dwindling to a single bird in May. Bird numbers reaching 1290 in September with other high counts through August to January (see monthly maxima in table below).

Birds were recorded feeding in the farm fields on 7 occasions (maximum 43 in thirteen acre field on 23rd November 2020). All but one of these records are thought to refer to thirteen acre field though there was a single record of 1 feeding with Curlew in Martins Field (adjacent to Longmeadow Lane) on 29th January 2021. However, the fields (especially those north of the dual carriageway) are probably checked less frequently than Holes Bay itself.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
453* (19 th)	200+ (27 th)	250+ (20 th)	134 (20 th)	1 (4 th)	2 (15 th)	295 (28 th)	860 (16 th)	1290 (28 th)	700+ (6 th)	640 (7 th)	785+ (30 th)

Combined Holes Bay counts by WeBS counters shown by *

For some years Black-tailed Godwit have been colour-ringed in a number of European countries to enable the migratory movements of individual birds to be tracked. The convention when reporting such birds is to give the (bird's) left leg first followed by the right leg, some rings may also have a letter printed on them or a protruding 'flag'. Three colour-ringed birds were recorded in Holes Bay on 25th September 2020. Information received back from the ringing schemes showed that these birds had the following histories:



Bird 1 – Rings White/Black – Red/White(X) – ringed Iceland 11th July 2009 – subsequently reported from Dorset (Brownsea Island, Lytchett Bay, Middlebere, Wareham and Poole Park), Hampshire, Lincolnshire, Holland and Iceland. Photographed at Lytchett Bay on 27th August 2016, photo Ian Ballam



Bird 2 – Rings Green/Orange-Red/Orange (Z) – ringed Iceland 20th June 2013 – subsequently reported from Dorset (Lytchett Bay and Holes Bay), Hampshire, Liverpool, Holland and Iceland. Photographed in 2018 at Lytchett Bay, photo Shaun Robson



Bird 3 – Rings (LNL) Lime/Black/Lime – YRY (yellow/red/yellow) – ringed Axe Estury, Devon 10th November 2013 – subsequently reported from Exeter, Dorset (Arne, Baiter, Brownsea Island, Lytchett Bay and Holes Bay), Devon (Exeter), Kent and Hampshire. Photographed at Lytchett Bay in 2018 – photo Ian Ballam

Turnstone (*Arenaria interpres*)

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

A single record of one bird seen in north west Holes Bay on 3rd September 2020 (seen from the between the stone bench and the Creekmoor drain).



Left: Dunlin, right; Turnstone (Martin Adams)

Knot (*Calidris canutus*)

A small flock sometime found on the mudflats in Holes Bay, probably appearing more regularly in recent years.

A large increase in the number of records (recorded on 53 dates in 2020, compared to 7 dates in 2019) even allowing for the increased recording effort in 2020. Maximum count of 50 is also greater than in recent years. It is not always easy to identify or count birds roosting amongst other waders, but it seems likely that birds were regularly present from 18th July 2020 to the end of the year. Usually recorded in the north part of Holes Bay, birds often being counted from the shore of Upton Country Park.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-	-	-	-	-	-	2 (23 rd)	4 (18 th)	50 (28 th)	28 (19 th)	51 (11 th)	33 (2 nd)

Ruff (*Calidris pugnax*)

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

One on 16th August 2020 in Holes Bay was the only record. This bird was amongst the Black-tailed Godwit and it would be easy for birds to be over-looked given the dense roosting flocks that the Godwit form.

Curlew Sandpiper (*Calidris ferruginea*)

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

Two records from Holes Bay NW: a single bird on 9th August 2020 and 2 on 2nd October 2020.

Sanderling (*Calidris alba*)

More characteristic of sandy beaches, this small, 'busy' wader is not known to have previously been recorded in Holes Bay.

Possibly a first record for Holes Bay, 22 were reported in NW Holes Bay on 12th November 2020.

Dunlin (*Calidris 16etanu*)

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

Frequently present January-March and July-December 2020, with two records in May 2020 as well.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
458*	13	20	-	c60	no	16	3	23	142	345*	403
(19 th)	(8 th)	(2 nd)		(4 th)	counts	(28 th)	(24 th)	(27 th)	(10 th)	(29 th)	(6 th)

Combined Holes Bay counts by WeBS counters shown by *

Woodcock (*Scolopax rusticola*)

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

A single record of one flushed from an area of woodland at Upton Country Park on 1st April 2020.

Jack Snipe (*Lymnocyptes minimus*)

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

One was reported as being flushed from the edge of the dual carriageway of the Holes Bay Road on 15th November 2020.

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 seen in winter. Birds may be heard calling as they fly out of the saltmarsh at dusk.

Only eight records from February, April, November and December. The largest count was of 41 birds flushed by a high tide on 12th February 2020 and there were other records of birds flying around at high tide, and birds heard leaving Holes Bay at dusk. Combined with the occasional report of birds seen on the saltmarsh or mudflats, these suggest that there may be more Snipe present than these records suggest.

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.

No known records of birds in the spring but recorded on 15 dates in August-September 2020, the majority of records were of single birds but 10 were recorded on 18th August 2020, with 8 in NE and 2 in NW Holes Bay.

Green Sandpiper (*Tringa ochropus*)

A scarce passage migrant or winter visitor, usually of single birds. Sometimes frequents the channels entering Holes Bay on the east side of the bay.

Single birds recorded on 4th August 2020 (in the Creekmoor Channel upstream of the dual carriageway), on 29th August 2020 (in front of the stone bench) and on 23rd November 2020 in Holes Bay near the mouth of the Creekmoor Channel. As in 2019 there seems to be an association with the Creekmoor channel the ecology of which has changed since flood prevention works were carried out there a few years ago.

Redshank (*Tringa 17etanus*)

Present in Holes Bay for most of the year, but not thought to breed (though may have done so in the past), passage or wintering flocks may number 200 or more.

Recorded in all months of the year, with few birds in summer and no records of breeding; large numbers in autumn and winter.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
168*	272*	138*	50	1	10	172	354	198*	150	192*	122*
(19 th)	(23 rd)	(8 th)	(4 th)	(2 nd)	(26 th)	(28 th)	(18 th)	(27 th)	(5 th)	(22 th)	(13 th)

Combined Holes Bay counts by WeBS counters shown by *



Left to right: Greenshank (Rene Goad), Spotted Redshank (Rene Goad) and Redshank (Mark Wright)

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.

Only two records of 1 on 21st August and 2 on 27th September 2020.

Greenshank (*Tringa nebularia*)

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

1-2 birds recorded in Holes Bay on 11 dates in July-August and October-November 2020

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.

Present all year often in large numbers but birds often not counted and monthly maxima given below are almost certainly under estimates of totals involved. Largest counts referred to birds flying to roost in the Harbour at dusk or leaving in the morning. Often seen feeding in the grass areas of Upton Country Park and Upton Park Farm, e.g. 154 feeding in the field between the car park and Upton Park Farm on 15th January 2020. Juveniles recorded from late summer.

Maximum monthly counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
499 (15 th)	1000+ (18 th)	c400 (23 rd)	4 (1 st)	c130 (12 th)	c100 (22 nd)	270 (28 th)	c500 (9 th)	320* (25 th)	1420 (18 th)	c600 (30 th)	700+ (20 th)

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.

Thirteen records of small numbers (maximum 5 on 4th April) in January-April 2020 with 3 also recorded on 12th July 2020. Birds often recorded as part of mixed gull flocks flying over (and true numbers may be greater than records suggest); sometimes recorded on the saltmarsh or on fields of Upton Park Farm.

Common Gull (*Larus canus*)

Small numbers of birds, often just a single bird recorded in spring, winter and autumn, usually in Holes Bay but probably under-recorded.

Small numbers regularly recorded in Holes Bay in January-March and July-December 2020. Most records of 1-3 birds but higher numbers included 14 in Holes Bay NE on 19th January 2020 and 33 in Holes Bay SE on 23rd February 2020.

Great Black-backed Gull (*Larus marinus*)

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

Recorded in all months of the year usually in small numbers (typically 1 to 7 birds) largest count 17 in Holes Bay on 23rd February 2020 (combined WeBS count for Holes Bay as a whole). One was seen carrying a prey item (possibly an Eel or Slow Worm) to Pergins Island on 24th April 2020. One to two bird were also seen flying around the Factory Road industrial estate just to the west of the recording area where Herring Gulls are known to breed.

Maximum monthly counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
6* (19 th)	17* (23 rd)	7* (8 th)	3 (14 th)	2+ (12 th)	3 (29 th)	3 (19 th)	5* (30 th)	5 (25 th)	3* (25 th)	5* (22 nd)	7* (13 th)

Combined Holes Bay counts by WeBS counters shown by *

Herring Gull (*Larus argentatus*)

Almost always present in Holes Bay, the Herring Gull breeds on buildings in Poole town and on industrial buildings to the west of Upton Country Park. Large numbers can also be seen loafing or feeding in Holes Bay.

Recorded in all months, usually present in Holes Bay and often seen overflying; a few birds may also feed in the farm fields. Relatively, few counts were recorded as gulls are often only recorded as 'present' by birdwatchers and birds flying to/from roost sites may not be noted. As a result, the maxima figures given below probably do not give a true picture of the numbers occurring. Birds are known to breed just outside the recording area on roofs in Poole town. In 2020 birds were also recorded nearby breeding on the roofs of units in the Factory Road industrial estate immediately to the west of the SANG close to the Roper's Lane footpath. At least 2 pairs bred here with 2 broods each of 2 chicks seen on 27th June 2020. The roofs here are difficult to observe so it is possible that more breeding pairs were present.

Monthly maximum counts:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
87*	323*	29*	6	45	14	330	c500	42*	30*	c300	52*
(19 th)	(23 rd)	(8 th)	(8 th)	(14 th)	(27 th)	(28 th)	(9 th)	(27 th)	(25 th)	(30 th)	(13 th)

Combined Holes Bay counts by WeBS counters shown by *

Yellow-legged Gull (*Larus michahellis*)

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

Four records of birds, usually in south-east or north-east Holes Bay: 3 on 14th May, 2 on 21st & 1 on 30th August 2020 and 1 on 18th November 2020.

Lesser Black-backed Gull (*Larus fuscus*)

Regularly present in small numbers in Holes Bay.

Recorded in all months of the year in low numbers (usually less than 10 birds), maximum 13 (including 3 juveniles) on 9th August 2020.

Sandwich Tern (*Thalasseus sandvicensis*)

Usually thought of as summer visitor, with a breeding colony on Brownsea Island, this bird is only seen occasionally in Holes Bay, usually with just 1 or 2 birds at a time – the bird is now seen later in the year and occasionally in winter in and around Poole Harbour.

Ten records of 1-3 birds in Holes Bay in January, April, May, June, October and December.

Common Tern (*Sterna hirundo*)

Like the Sandwich Tern, this summer migrant breeds on Brownsea Island but relatively few visit Holes Bay and then usually only 1 or 2 birds at a time.

Single birds on 14th May, 15th & 29th June, 16th July, 9th & 30th August with 2 on 16th July 2020.

Great Northern Diver (*Gavia immer*)

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

A single bird on 4 dates in January-February and 3 dates in November-December 2020, mostly seen south of the railway line.



Left: Great Crested Grebe (Rene Goad), right: Great Northern Diver (Andy Collyer)

Shag (*Phalacrocorax aristotelis*)

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

Three records of single birds in Holes Bay on 12th, 19th & 21st of January 2020.

Cormorant (*Phalacrocorax carbo*)

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

Present in Holes Bay throughout the year, often with 15 or less birds being recorded but with the following large counts: 31 flying east on 30th September 2020, 43 on 7th October 2020, 200+ on 19th November 2020 and c50 on 18th December 2020.



Cormorants (Tanya Hart)

Spoonbill (*Platalea leucorodia*)

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

Only two known records: 2 on 8th and 6+ on 24th December 2020; the birds probably not present for very long.

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.

No definite records though 2 birds were seen at Lytchett Bay flying towards Holes Bay at dusk on several dates in December and were presumed to be roosting with Little Egrets, probably at a known roost site on Pergins Island. Despite several attempts to detect the birds arriving or leaving the roost site no birds were positively identified.

Grey Heron (*Ardea cinerea*)

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

Recorded in all months of the year in Holes Bay with maximum count of 17 on 27th September 2020 (WeBS combined count for all sectors of Holes Bay).

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.

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.

Monthly maxima

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7 (21 st)	20+ (6 th)	5 (14 th)	5 (2 nd)	6 (5 th)	30 (26 th)	38 (4 th)	105 (18 th)	54 (25 th)	22 (4 th)	12* (22 nd)	57 (20 th)

Combined Holes Bay counts by WeBS counters shown by *



Left: Little Egret (Rene Goad), right: Grey Heron (Rene Goad)

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 and was used by at least one Osprey in the autumn. A project to reintroduce the Osprey to Poole Harbour is currently being run by the Birds of Poole Harbour.

A single spring record of one heading north over Holes Bay on 14th May 2020. Fewer autumn records than in 2019, though still a good series of records. Up to 3 birds seen daily from 6th to the 11th October 2020 and a single bird was seen on 21st and 22nd October 2020. An Osprey platform was installed on Pergins Island in the spring with a webcam and birds used the platform on several occasions often after catching fish in the Bay, many of the birds being juveniles.



Right: Osprey in Holes Bay (Fiona Liddiard/ BoPH), left: Osprey on Pergins Island Platform (BoPH webcam)

Sparrowhawk (*Accipiter nisus*)

Regularly seen flying over Upton Country Park – probably breeds locally.

Single birds reported on 15 dates in January-March, June-August and October. A bird was seen carrying food to Pergins Island and it is possible a pair bred there.

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.

Two records of single birds in Holes Bay on 17th August and 28th September 2020; the appearance of the birds causing waders and wildfowl to take flight.

Hen Harrier (*Circus cyaneus*)

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

A possible was seen in Holes Bay NW on 19th and 21st November 2020 but the distant views meant the identity of the bird could not be confirmed.

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.

Definite records of birds flying over included 2 on 12th February, 1 on 18th September and 1 on 17th October 2020. However, birds were regularly reported flying over in and around Poole in the spring (with many birdwatchers spending more time at home as a result of the Coronavirus lockdown). It is likely that the number of birds overflying the recording area was much greater than the above records suggest.

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.

Recorded in all months and widely present in the recording areas with 1-3 birds often recorded from Upton Country Park in all months of the year, although it was noted that birds are less often seen perched on the wooden electricity pylons since that area was opened to the public as part of the SANG. A pair is thought to have bred in the trees close to Upton Park Farm, with a fledged (and noisy) youngster often seen in that area.



Left: Buzzard (Rene Goad), right – Juvenile Buzzard (Nick Woods)

Barn Owl (*Tyto alba*)

Occasionally recorded at Upton Country Park, though very rarely in recent years.

One reported from the cycle-path through Upton Country Park on 20th November 2020

Tawny Owl (*Strix aluco*)

Heard from woodland areas notably in Upton Country Park

Few records but birds recorded from Upton Country Park in January, March-April, June and November. Both males and females were heard, and birds were heard calling from the Grove, 'Jack's Wood', the shoreline near the stone bench, the woodland near the Park and Ride site and from the direction of Northmead Copse. A juvenile was reported calling on 12th June 2020. 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), birds starting to appear in August. Often seen perched on posts (or a shopping trolley) close to the Holes Bay cycleway and also visits ponds in Upton Country Park.



Kingfishers (Mark Wright)

Recorded on 75 dates from 1st January to 6th March 2020 and 30th July to 30th December 2020 from edges of Holes Bay and PC World channel; usually a single bird but occasionally 2 or 3 birds and at least 4 present on 6th November 2020.

Great Spotted Woodpecker (*Dendrocopos major*)

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



Great Spotted Woodpecker (Andy Collyer 12th November 2020)

Regularly recorded in Upton Country Park with birds drumming in 4 locations on 2nd March 2020 breeding confirmed by an occupied nest in an ash tree along the main drive to Upton House on 18th May 2020. A single bird was heard drumming on 24th December 2020.

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 at other sites.

Recorded in most months of the year at Upton Country Park but no definite evidence of breeding in 2020.



Left: Green Woodpecker (Rene Goad), right: Nuthatch (Rene Goad)

Kestrel (*Falco tinnunculus*)

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

Only three records received – single birds around Holes Bay on 15th July and 18th & 30th November 2020.

Hobby (*Falco subbuteo*)

A summer migrant, the Hobby is a rare breeding bird on Dorset's heaths and forests, and birds are occasionally seen in the recording area.

Two records of single birds flying over Upton Country Park and the northern part of Holes Bay on 12th May and 6th July 2020.

Peregrine (*Falco peregrinus*)

Frequently reported over Holes Bay at most times of the year – often alarming the waders and wildfowl. Birds breed on the coastal cliffs and also sometimes on tall buildings.

Recorded on 25 dates (1-2 birds) in all months, except April and November 2020. The majority of records referring to birds perched on the 'ASDA building' on the south side of Holes Bay. These records include a ringed male (letters 'HF') known to have hatched from the Bournemouth clock tower nest in 2016 and a female (bearing a red colour ring numbered 20 on her left leg) which hatched at the New Milton water tower in 2018. Although it is not thought that these birds bred this year, this could occur in the future. Birds were also seen apparently prospecting another nest site. Occasional records from elsewhere around Holes Bay, including Upton Country Park and the pylons on the site of the power station; birds sometimes flushing waders and wildfowl from the Bay.



Peregrine (Rene Goad)

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.

Recorded in most months of the year with maximum of 7 in Upton Country Park on 19th January 2020; no information on breeding received.

Magpie (*Pica pica*)

A common bird, probably breeding around the recording area.

Recorded in and around Upton Country Park in most months, maximum 11 on 19th January 2020. No records of breeding but it is likely that birds bred in a number of 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.

Usually present in and around Upton Country Park with maximum recorded count of 64 near Upton Park Farm on 3rd February 2020; probably under-recorded. Likely to have bred but no reports received.

Rook (*Corvus frugilegus*)

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

Possibly under-recorded, only two records: 2 on 23rd September and 1 on 22nd December 2020 both records from Upton Country Park.



Left: Rook, (Nick Woods), right Jay (Nick Woods)

Carrion Crow (*Corvus corone*)

A resident species probably breeding in the recording area.

Usually present in Upton Country Park, with birds recorded in every month. Fledged young seen in July 2020 suggesting at least one pair bred; highest count recorded was 30 birds on 8th November 2020,

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.

Recorded in most months of the year in small numbers –maximum 8 on 17th November 2020. Presumed family parties were recorded on several dates suggesting a pair bred in or near the recording area.

Coal Tit (*Periparus ater*)

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

All records were from Upton Country Park with a maximum count of 4 on 19th January 2020. Fledged young were seen on the west side of the SANG showing that at least one pair bred at Upton Country Park.

Blue Tit (*Cyanistes caeruleus*)

Widespread and common as a breeding bird.

Recorded in most months of the year; fledged young were reported in Upton Country Park in May and June 2020 and this species probably bred widely around the area; few counts of birds present were made although 31 were counted around Upton Country Park on 19th January 2020 on the 'Poole Harbour big bird count'.

Great Tit (*Parus major*)

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

Regularly recorded in Upton Country Park with 19 birds counted on the Poole Harbour Big Bird Count on 19th January 2020. Breeding was confirmed by presence of two recently fledged young in Upton Country Park on 18th May 2020.



Left to right – Coal Tit (Nick Woods), Blue Tit (Rene Goad), Great Tit (Nick Woods)

Bearded Tit (*Panurus biarmicus*)

A very scarce autumn or winter visitor to the more extensive reedbeds – often only one or two birds and not recorded in every year.

One on 5th November 2020 in NE Holes Bay where the reed bed thins out towards the Creekmoor drain; bird then flying back towards the thicker reed bed.

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 two records received – 1+ on 27th August and 3 on 29th August 2020 both at Upton Country Park/Holes Bay north; though possibly under-recorded.

Swallow (*Hirundo rustica*)

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

Regularly recorded from 17th April to 31st October 2020, usually in small numbers with only two counts of over 10 birds (20 on 6th July and 12+ on 1st October 2020) – though possibly under-recorded. At least one but probably two pairs are reported to have bred at Upton Park Farm and fledged young were seen in the Country Park. No birds bred at the regular breeding site in the car park toilet block at Upton Country Park, probably because the roof space had been netted in anticipation of demolition and re-construction of the building. There were no records of breeding from the courtyard of the tearooms at the Park either, though this may have been because of access limitations due to the Coronavirus lockdown.

House Martin (*Delichon urbicum*)

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

Recorded from 5th June to 14th October 2020 with small flocks feeding over Upton Country Park in the late summer, maximum number c100 on 14th October 2020.

Cetti's Warbler (*Cettia cetti*)

The sudden, indigent 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.

Singing birds in March-June and September-October, one regularly at the north end of the boardwalk and one near the observation point in Upton Country Park, suggesting pairs once again bred at these locations on the shore of Holes Bay. Birds also recorded at the north end of the Grove lake and along the PC World channel.

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.

Recorded in most months with the largest flock one of 20 on 28th October 2020. Recently fledged young were seen in Upton Country Park on 21st July 2020 suggesting at least one pair bred there.

Yellow-browed Warbler (*Phylloscopus inornatus*)

A very scarce visitor with a few records from wet scrubby areas around Holes Bay.

One record of a single bird near Bascombe's pond in Upton Country Park on 19th October 2020.

Willow Warbler (*Phylloscopus trochilus*)

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

Two spring records: 2 on 14th April 2020 (including one singing behind the Grove pond) and 1 on 27th April 2020 singing along the north-east shoreline of Upton Country Park. In autumn migrants recorded on 7 dates from 28th July to 20th August 2020 with a maximum of 8 at the PC World drain on 1st August 2020, and including 2 other records of 5 or more birds. A fall of 'dozens of Willow Warblers, handfuls of Spotted Flycatchers and Blackcap' was reported on 2nd September 2020 in scrub along the Holes Bay Road (near the railway line).

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 also found as a winter visitor.

Recorded in all months of the year. Wintering records were mainly from the PC World channel including 12 on 19th January, 15+ on the 25th February 2020 and 6 on 11th December 2020. Presumed migrants also commonly recorded, with a maximum recorded count of c20 at the same location on 5th October 2020. Singing birds found widely around Upton Country Park suggesting a number of pairs bred.

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.

Five records all of birds at the PCW channel: 1 on 4th, 1 on 19th & a probable on 30th January 2020 and 1 on 2nd & 2 on 25th February 2020.



Left: Chiffchaff (Nick Woods), right: Siberian Chiffchaff (Rene Goad 5th March 2020)

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.

Two records of single birds along the shoreline in Upton Country Park – one singing at the stone bench on 27th April 2020 and one in the fenced area behind the boardwalk on 3rd May 2020.

Reed Warbler (*Acrocephalus scirpaceus*)

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

Regularly recorded in low numbers (usually less than 10 birds) from 17th April to 8th September 2020. Singing birds were recorded at the following locations in Upton Country Park: shoreline (7 birds), the Grove lake (1 bird) and the duck pond (1 bird) and fledged young were seen at the Grove pond on 24th August 2020, suggesting that several pairs bred.

Blackcap (*Sylvia atricapilla*)

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

Regularly present from 25th February 2020 to 25th October 2020 with singing birds widespread in woodland and scrub areas suggesting a number of pairs bred, fledged young were seen begging for food in Upton Country Park on 21st July 2020 and also by the PC World drain. Maximum recorded count was 6 in the PCW drain on 4th July 2020, this and some other records possibly referring to migrants. A fall of 'dozens of Willow Warblers, handfuls of Spotted Flycatchers and Blackcap' was reported in Scrub along the Holes Bay Road (near the railway line) on 2nd September 2020.

Garden Warbler (*Sylvia borin*)

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

Two in Holes Bay NW on 1st August 2020 was the only record.

Whitethroat (*Sylvia communis*)

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

Five records probably of birds passing through: 2 on 14th & 1 on 31st May 2020, a juvenile on 15th & 1 on 16th July 2020 and 1 on 27th August 2020. Birds recorded from various sites around Holes Bay but no records from Upton Country Park.

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 3) recorded in all months of the year except June, usually from Upton Country Park, with records widely scattered from woodland and garden areas; occasional records also from the PC World channel. No confirmed records of breeding though singing birds were recorded near the winter garden, in the Grove lake and on the west side of the SANG near the footpath to Allens Lane, suggesting several birds may have bred.



Left: Goldcrest (Martin Adams), right Firecrest (Nick Woods 17th)

Goldcrest (*Regulus regulus*)

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

Present all year in the wooded parts of Upton Country Park and also recorded from the PC World channel. Breeding confirmed by presence of fledged young in Upton Country Park on 21st July 2020. Maximum number recorded c 12 on 5th November 2020.

Wren (*Troglodytes troglodytes*)

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

Widely reported in all months of the year usually in small numbers, maximum count of 6 at Upton Country Park on 19th January 2020. No confirmed reports of breeding but almost certainly bred in various locations.

Nuthatch (*Sitta europaea*)

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

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. No confirmed breeding records though almost certainly did breed; maximum count 9 in Upton Country Park on 19th January 2020.

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 in January-April, June, August and November – usually as single birds; most records from Upton Country Park. Records widely distributed from Jack's Wood (near the Hamworthy entrance), to the SANG, near the duck pond, Bascombe's Pond and the woodland along the north-east shoreline – suggesting several pairs are present.

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 are may also breed in trees or buildings.

Recorded in all months of the year, though no recorded signs of local breeding. Counts included: c 60 with sheep near Upton Farm and c40 on power lines on 3rd, 110+ on 23rd September and 200+ on 25th October 2020. Probably under-recorded.



Starlings, Upton Country Park 3rd September 2020 (Nick Woods)

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.

Recorded in all months of the year, mainly from Upton Country Park and the PC World channel. Several pairs probably bred with birds seen carrying faecal sacs on two dates. Largest counts were 13 on 19th January 2020, 18 on 25th October 2020 with 6 together at the Camelia border in Upton Country Park on 5th November 2020, suggesting migrant or wintering birds.

Fieldfare (*Turdus pilaris*)

Mainly a winter visitor with some birds also passing through, numbers may increase with flocks of over 100 birds being seen in really cold weather.

No known records in first winter period and only 3 records in the second (1 on 10th, 1 on 17th and 2 on 30th November 2020).

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 5th January to 11th March 2020 (maximum c40 on 18th February 2020) and from 15th October 2020 to the end of the year (maximum 50+ on 24th December 2020); frequently present at Upton Country Park.

Song Thrush (*Turdus philomelos*)

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

Regularly present at Upton Country Park and probably other parts of the recording area as well, including singing birds. However, no confirmed records of breeding. The highest count recorded was of 9 birds on 19th January 2020.

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 (1-3 birds) from Upton Country Park in most months of the year. At least one pair it thought to have bred at Upton Country Park (fledged young seen on 14th September 2020).

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.

Recorded on 12 dates from 14th August to 21st September 2020, usually 1 or 2 birds but with a maximum of 5 on 5th September 2020, birds were most frequently recorded in the southern half of the east field of Upton Country Park (the field behind the stone bench) or at the PC World channel. A fall of 'dozens of Willow Warblers, handfuls of Spotted Flycatchers and Blackcap' was recorded in scrub along the Holes Bay Road (near the railway line) on 2nd September 2020.



Left:Wheatear (Rene Goad), right: Spotted Flycatcher (Nick Woods)

Robin (*Erithacus rubecula*)

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

Present through the year and almost certainly bred though no definite reports. Numbers probably higher in winter and two counts at Upton Country Park (made as part of the Poole Harbour big bird count) of 22 on 19th January 2020 and 34 on 25th October 2020 support this.

Redstart (*Phoenicurus phoenicurus*)

A scarce passage migrant around Holes Bay.

One record: a confiding male in scrub along the Holes Bay cycleway (by the railway) on 2nd September 2020, amongst a fall of 'dozens of Willow Warblers, handfuls of Spotted Flycatchers and Blackcap'.

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.

A good count of 10+ on the shore of Upton Country Park near the bird screen on 3rd October 2020 and 1-2 on 11th October, 10th & 29th November and 31st December 2020. Other records all from the shoreline of Upton Country Park near the boardwalk.

Wheatear (*Oenanthe oenanthe*)

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

Two records of single birds on 18th March 2020 (in the 'new fields' of the SANG) and on 27th August 2020 on the east shore by the cycle path alongside Holes Bay.

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.

Few records received though maybe under-recorded. Noted on the edge of Upton Country Park around Symes Road, Factory Road and on the Hamworthy shoreline, maximum count at Upton Country Park of 13 on 29th June 2020; maximum count from recording area 100+ in south-west part of Holes Bay on 25th October 2020. Sometimes seen feeding on the shoreline or in reed beds adjacent to residential areas.

Dunnock (*Prunella modularis*)

A widespread breeding resident.

Recorded in most months of the year, with a maximum count of 5 birds at Upton Country Park on 19th January 2020, though no evidence of breeding was reported.

Yellow Wagtail (*Motacilla flava*)

A scarce passage migrant, sometimes seen along the shoreline or simply as birds flying over.

One record of two birds flying over on 14th September 2020.

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.



Grey Wagtail (Mark Wright)

Small numbers (usually 1-2) recorded on 30 dates in January-February, May-June and September-December 2020 with a maximum of 4 on 15th September 2020. A recently fledged bird was seen on 1st June 2020 but this was not thought to be a locally bred bird.

Pied 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 most months of the year, usually in small numbers (10 or less). Juveniles were seen on a number of occasions suggesting local breeding. A pair may have bred at the Tearooms in Upton Country Park, which was quieter than usual in the spring due to the Coronavirus lockdown. Larger flocks recorded in winter, maximum 26 on 24th October 2020, these were often in the fields of Upton Park Farm, sometimes accompanying farm stock.

Meadow Pipit (*Anthus pratensis*)

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

Recorded in small numbers on 18 dates in January-March and September-December, maximum number 18 on 14th December 2020. Birds usually on the open grassland of the farm fields or recently opened SANG areas at Upton Country Park; occasionally seen along the Holes Bay cycleway.

Water Pipit (*Anthus spinoletta*)

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

A pipit seen on the rock armour of the cycle way in north-east Holes Bay on 2nd November 2020 was possibly this species – but was seen insufficiently well seen for the identification to be certain.

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.

Single birds recorded on 5th, 6th & 21st January and 18th February 2020 and 1-2 birds recorded on 10 dates between 16th October to 31st December 2020; most records from Holes Bay NE along the cycleway.

'Scandinavian' Rock Pipit (*Anthus petrosus littoralis*)

Two were recorded on 29th February 2020 and were moulting into breeding plumage.

Chaffinch (*Fringilla coelebs*)

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

Present all year including singing birds in Upton Country Park but no confirmed records of birds breeding; largest count was of 15 birds at Upton Country Park on 25th October 2020.

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.

Recorded in January-July and November-December with singing birds in Upton Country Park near the Grove lake, Bascombe's pond and the SANG car park, so may well have bred. Five birds were recorded together near the SANG car park on 7th December 2020, possibly a family party.



Left to right: House Sparrow (Martin Adams), Bullfinch (Rene Goad), Greenfinch (Nick Woods)

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.

Recorded in small numbers in all months of the year in Upton Country Park, maximum 15 on 8th & 22nd November 2020. Singing birds were seen regularly on the edge of the SANG close to the

footpath from Roper's Lane where fledged young were also seen, indicating a small breeding colony here. Birds may also have bred along the shoreline near the duck pond.

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 January, May, June, July and October – maximum count 30 on 31st January 2020. Most of the records were from the fields (lamb's leas and half-moon) recently incorporated into the SANG. On some occasions birds were observed feeding amongst recently planted trees and scrub. The grass in these areas had previously been chemically weed-killed and it is thought the birds were feeding on seeds produced by re-growing weeds. There were no records of singing birds or other signs of breeding.

Lesser Redpoll (*Acanthis cabaret*)

Once thought of as an 'occasional winter visitor', now reported vary rarely.

A good series of records: 2 near the observation point in Upton Country Park on 10th November 2020 and c8 on 20th and 3 (near the stone bench) on 31st December 2020.

Goldfinch (*Carduelis carduelis*)

Probably breeds locally and flocks occur in autumn and winter.

Recorded in most months of the year with fledged young seen in Upton Country Park at a number of locations suggested it may have bred. Flocks present in autumn months, maximum 40 on 23rd August 2020.

Siskin (*Spinus spinus*)

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

In Upton Country Park, nine records of 1-8+ birds in February and October-December 2020; most records from the area of Alders at the edge of the east field. A single record at the PC World channel of 2 birds on 19th January 2020.

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.

Few records (of single birds from March/April and November 2020), though singing birds reported from at least two locations in the shoreline reed beds at Upton Country Park, suggesting that one or more pairs may have bred there.

The Wetland Bird Survey [WeBS counts] in Holes Bay

Stephen F. Smith

Introduction

It seemed worthwhile to include this brief account of the ‘WeBS’ counts in Holes Bay as these counts have been running so regularly and for so long that it is possible to draw valid comparisons between the status of common wetland species over several decades. The WeBS scheme extends over many European countries, and its overall aim is to monitor numbers of waders and wildfowl at the wetland sites across the countries and to decide where the priorities for conservation lie. Nationally, the WeBS counts in Britain have been carried out since 1947, and many of the results are publicly available on the BTO website, but most of the figures given in this article come from either the 1990s, when I acted as co-ordinator for Poole Harbour, or from the past decade 2010 – 2019, when the counts were organised by the local charity Birds of Poole Harbour. The data for this past decade were kindly provided by Paul Morton and Rod Brummitt at BoPH, supplemented by information from the BTO website [1].

National and international importance

Some explanation may be needed regarding the terms of National and International Importance. A **nationally important** population for a particular species is defined as 1% or more of the British wintering population.

The criteria for **international importance** are slightly more complicated in that a distinction is drawn between wildfowl [i.e. ducks, geese and swans] on the one hand, and waders on the other.

In the case of **wildfowl**, an internationally important population is defined as 1% or more of the North-west European wintering population of that species. By the term “North-west European” is meant the area between northern Norway and the Straits of Gibraltar: the North Sea and Baltic coastal areas, the wetlands of Holland, Belgium and northern Germany, the whole of Britain and Ireland, the northern and western half of France, all of Portugal and the western half of Spain.

Waders require a more wide-ranging specification as so many of them winter further south: the single most important site for European waders is traditionally the Banc d’Arguin in Mauretania, and large numbers also winter along the western coasts of Africa as far as the Cape of Good Hope. This is known as the East Atlantic Flyway population, and 1% or more of it counts as an internationally important population.

WeBS in Britain and Poole Harbour

Well over 2,000 sites in Britain are surveyed – some very large like the Wash or Morecambe Bay, others small like Christchurch Harbour. Poole Harbour is one of the larger sites, and because of its irregular shape it is divided into about 25 areas, each of which is small enough to be covered by a single counter. The counts take place on pre-arranged dates, and once a month between August and March, this team of 25-plus counters takes up position around Poole Harbour and counts the birds at **low tide**, when the waders are feeding on the exposed mud. Timing is crucial: as the tide rises, many of the waders disappear among the saltmarsh grasses, and the double high tides of Poole Harbour only allow about an hour of optimum conditions.

WEBS counts in Holes Bay

Holes Bay can be divided quite neatly into four sectors, north and south of the railway and east and west of Pergins Island:

North-west:	north of the railway, viewed from Upton Country Park
North-east:	north of the railway, viewed from the cycleway [this sector usually produces the highest numbers of birds]
South-west:	south of the railway, viewed from Monkey Island, just north of Cobbs Quay
South-east:	south of the railway, viewed from the cycleway

Results and comments on selected species

The ‘WeBS species’ are the routine wildfowl and waders which occur in numbers large enough for meaningful trends to be seen. The major WeBS species in Holes Bay are Mute Swan, Canada Goose, Shelduck, Mallard, Wigeon, Teal, Shoveler, Pintail, Little Grebe, Great Crested Grebe, Grey Heron, Little Egret, Cormorant, Moorhen, Oystercatcher, Avocet, Black-tailed Godwit, Curlew, Dunlin, Knot, Redshank and Kingfisher. Other species are present irregularly and in smaller numbers: these include Gadwall, Red-breasted Merganser, Spoonbill, Osprey, Grey Plover, Whimbrel, Snipe, Greenshank, Spotted Redshank and, sadly, now also Lapwing.

Shelduck *Tadorna tadorna* – a species of national importance in Poole Harbour.

Shelduck follow a very regular pattern in that after the breeding season they leave Poole Harbour for the coast of Germany, where they hold their late-summer moult before slowly returning to Britain and Ireland during the autumn. Numbers in southern England are at their highest in January and February, and during the 1990s, Poole Harbour held a winter population of around 3,000 – well into the levels of international importance. Numbers in Holes Bay were correspondingly impressive, with maxima around 400 in several years:

Holes Bay mean	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00
342	429	323	424	295	325	321	269	289	344	393

By the late 2010s, numbers in Poole Harbour had fallen to an average winter maximum of 1,225 [national rather than international importance], and the mean winter maximum in Holes Bay had fallen by about 30% from 342 to 238.

Holes Bay mean	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
238	154	347	351	186	165	291	148	229	287	218

Eurasian Wigeon *Mareca penelope*

As even the most casual visitor knows, the numbers of Wigeon have increased noticeably in Holes Bay in recent years, and the regular systematic counts make it clear by how much. Looking back to the 1990s, Wigeon numbers in Poole Harbour as a whole typically reached a maximum of about 1,000 birds, and by current standards the numbers in Holes Bay in those days were tiny. At that time, the main site for Wigeon was Little Sea at Studland NNR, and during the whole of the 1990s, Wigeon numbers in Holes Bay exceeded 100 only once: a select band of 104 in January 1997, only 27 of which were north of the railway!

Since the turn of the millennium, Wigeon have increased in Poole Harbour as a whole, and the current average winter maximum stands at 3916 – not very far from the 4500 required for national importance. The species has also become more strongly concentrated in Holes Bay. The average winter maximum in Holes Bay for the 2010s is 1767, and in every winter since 2016 the maximum in the Bay has exceeded 2000. The all-time WeBS record in Holes Bay occurred in December 2018, distributed across the four sectors as follows:

Total	NW	NE	SW	SE
2534	325	1283	364	562

Wigeon is a classic WeBS species in that it occurs in large numbers in mid-winter, and the WeBS counts clearly show numbers building throughout the autumn. The wader species dealt with below do not behave quite so conveniently, as there is usually a peak of autumn migrants, followed by somewhat lower numbers in midwinter. Traditionally the WeBS counts in Poole Harbour have been made from September to March inclusive, so wader migration in August, or even late July, has been overlooked, and the recent introduction of an August WeBS count is a welcome development.

Avocet *Recurvirostra avosetta* – a species of international importance in Poole Harbour

It is scarcely credible that as recently as the 1970s, Avocet was a rare winter visitor to Brownsea Lagoon and Middlebere; around 1980 the Harbour maximum crept over the 20 mark for the first time. Today the current average winter maximum for the Harbour as a whole is 1535, which makes the Poole population the fourth-largest in Britain and well over the threshold for international importance [940]. The species is now regularly seen in numbers all around the Harbour, and Holes Bay has had its share of records. The Holes Bay winter maxima since 2010 are as follows:

Holes Bay mean	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
186	42	137	208	150	194	263	154	249	437	299

The highest-ever Holes Bay WeBS count of 437 was made on 20th Jan 2019, and the birds were distributed around the Bay as follows:

Total	NW	NE	SW	SE
437	45	272	22	98

Black-tailed Godwit *Limosa limosa ssp. islandica* – a species of international importance in Poole Harbour

This is another species which has done well, perhaps because of the healthy breeding population in Iceland. The current average winter maximum for Poole Harbour is 2336, which is well above the threshold for international importance of 1,100. Holes Bay usually holds about one quarter of the Poole Harbour population, with an average winter maximum of 563, which may occur in almost any month from October to March. Statistics like these clearly show the importance even of just the Holes Bay population on its own, and provide motivation for the counters, who can feel that their own individual efforts are helping the conservation of the species on an international scale.

Eurasian Curlew *Numenius arquata*

Holes Bay mean	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
101	63	81	132	123	98	130	113	141	114	122

As Curlew is one of the top priority species for current conservation efforts, it is pleasing to see that the current mean winter maximum for Poole Harbour is at 1108 [tantalisingly close to the threshold for national importance of 1200], and that the annual maximum in Holes Bay appears stable at around the 100 mark. Informal counts in late summer 2020, covering all parts of the Bay, produced totals of 97 on 28th July and 104 on 8th August. These figures are an argument for extending the Poole Harbour WeBS counts to include August, as in fact happened in 2020.

Redshank *Tringa totanus*

The winter maxima in the 1990s were impressive:

Mean	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00
652	556	697	1120	522	663	733	722	509	681	313

The very high count of 1,120 was made on 20th September 1992, and birds were distributed as follows:

Total	NW	NE	SW	SE
1120	457	162	357	144

The Redshanks of Holes Bay also hold a place in Poole Harbour birding tradition, as it was Robin Ward who carried out a professional Environmental Impact Assessment in 1988 on the effects of the new A350 relief road, focusing on Redshanks. Robin put his spare moments to good use by encouraging the revival of then ailing WeBS counts [at that time called the Birds of Estuaries Enquiry] and motivating the formation of the famous Poole birders' pub meetings. [2]

Today the picture is less bright, however. Redshank has been in decline for twenty years in Britain as a breeding species, and the average maximum for the 2010s is barely more than half that of the equivalent period in the 1990s:

Mean	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
337	155	225	283	449	648	328	299	328	287	363

A frequent objection to WeBS

“But I counted more than that myself!”

This may very well be so: it may happen that a visitor out for a day’s birding may exceed the WeBS count of, say, Avocet for that month, and if this happens it is normally the higher figure, [i.e. the birder’s figure] that appears in the Dorset Bird Report as the maximum. But the purpose of WeBS is to provide figures which can be used in **nationwide comparisons** between estuaries, and this can only happen if all estuaries are covered under the same conditions. So the WeBS organisers can’t just replace the count figure with the birder’s figure; to do so would be to give an advantage to places which are more popular with recreational birders.

Conclusions from the results

The WeBS counts purely provide numbers of birds: they do not attempt to explain the reasons behind the changes. Changes in bird numbers lead to a wide range of questions, and the following are just a few of those which occur to the lay observer:

- What has been the effect of the increase in green algae : has it benefited the Wigeon and harmed the Shelduck? Do the Wigeon benefit from the sewage which enters Holes Bay via the channel that drains from the treatment plant in Cabot Lane?
- Are Wigeon suffering from increased shooting pressure in parts of the harbour other than Holes Bay?
- What links are there between the disappearance of duck from Little Sea, Studland and the increase in Holes Bay?

Comparison with Lytchett Bay

Apart from local rivalry, it is interesting to compare figures between the two bays. Holes Bay is about twice the size of Lytchett Bay, but the two bays lie close together in the northern reaches of Poole Harbour, and some of the species occur in comparable concentrations. There appears to be a large interchange of Black-tailed Godwit, especially on a falling tide, when birds leave the roost in north-west Holes Bay and fly west across Upton and Hamworthy, apparently heading for feeding areas in Lytchett Bay. This causes a problem for the WeBS counters as they try to avoid duplication, and improved communication by mobile phone during the counts might be welcome. Please note that the figures below are based entirely on the WeBS counts: they can easily be exceeded by the figures given in the Lytchett Bay report, which are based on far more frequent observations.

Average winter maximum 2010 – 20	Holes Bay	Lytchett Bay
Shelduck	238	74
Wigeon	1767	416
Avocet	186	73
Curlew	101	72
Black-tailed Godwit	563	251
Redshank	337	180

It has been commented that Lytchett Bay provides the quality and Holes Bay provides the quantity. Lytchett Bay certainly scores by having large freshwater or brackish pools which attract the *Tringa* waders. Holes Bay is lacking in this kind of habitat, and there is no way that it can compete with Lytchett Bay’s current tally of 35 wader species, but Holes Bay still has much to offer those who enjoy the spectacle of big flocks of common birds, often at very close range.

References

[1] Much of the WeBS data is publicly available on the BTO website under ‘Numbers and Trends’:

<https://www.bto.org/our-science/projects/wetland-bird-survey/publications/webs-annual-report>

[2] Constantine, M., Hopper, N., and the Sound Approach: *Catching the Bug*, p. 20. The Sound Approach, 2012. Many of the WeBS results are available on the BTO website

Spartina, birds and bird watching in Holes Bay

Nick Woods

1. Introduction – ‘before Spartina’

1.1 Amongst the earliest photographs of Holes Bay is one of a well-dressed lady apparently rowing a Poole canoe type boat towards Pergin’s Island. A hand written caption states: “Holes Bay as we first knew it, no esparto grass”. The lady is probably the wife of William Llewelin, who purchased Upton House and its 930 acre estate in 1901 [1]. ‘Esparto’ seems to have been a local name for Common Cord Grass (*Spartina anglica*). The name Esparto was also used in the proceedings of the Dorset Natural History Society in a write up of a tour of Poole Harbour in 1925. Mr Llewelin had joined the society in 1905 and his wife and daughter were also members in the 1920s [2], so may have been familiar with the name Esparto. Strictly speaking, Esparto refers to a type of coarse grass found in southern Europe and North Africa used to make ropes and wickerwork [3], and the various *Spartina* species are usually known as Cord Grasses or sometimes as Rice Grasses [e.g. 4].



Fig 1 Llewelin family photo from the early twentieth century – “no esparto grass”.

1.2 It may seem odd that comment should be made about a type of grass, and in particular, its absence by the newish owners of a country estate. However, this type of grass was something of a biological phenomenon, spreading rapidly in Poole Harbour and having a dramatic impact on coastal habits here and around the world. There is now an extensive literature on the plant, including detailed studies of its spread around Poole Harbour, and much of the background information in this article is taken from these publications [e.g. 5, 6, 7 and 8].

2. The origins of *Spartina anglica*

2.1 Detailed research later showed that this particular species of *Spartina* is descended from a hybrid between Small Cord Grass (*S. maritima*), a native British Species and Smooth Cord Grass (*S. alterniflora*), generally regarded as a North American species and believed to have arrived in Southampton Water in the nineteenth century. The sterile hybrid was named Townsend's Cord Grass (*S. x townsendii*) and genetic changes (its chromosome number doubled) produced a completely new species, Common Cord Grass (*S. anglica*), which could set seed and spread by fragments moved around by the tides. All four of these species have been recorded from Poole Harbour (the American species being planted at one point [9]), though the robust plant (Fig. 2) which spread so rapidly and formed such dense stands throughout Poole Harbour is generally Common Cord Grass. It is believed that most the *Spartina* in Holes Bay is this species – simply referred to as '*Spartina*' in the rest of this article.



Fig 2 A recent photograph of *Spartina* in flower in Holes Bay.

3. The spread of *Spartina*

3.1 *Spartina* was first recorded in Poole Harbour in the 1890s, and was established in Holes Bay by 1901. Its rapid spread across the mudflats was monitored by the Bournemouth Natural Sciences Society [10]. Fig 3 is a photograph, probably taken by members of the society, in 1913 showing scattered clumps of the grass rapidly coalescing to form a dense sward across much of

Holes Bay. By 1924 the plant had covered over 60% of the intertidal area in Holes Bay [6] as shown in Fig 4. The potential of the new species to “re-claim” coastal mudflats was also seen as an opportunity and led to an export trade in the plant from Poole Harbour to other British estuaries, and to countries as far away as Denmark, Trinidad, Australia and China.

3.2 However, the potential negative effects of the plant on Poole Harbour were of sufficient concern for a report to be prepared for the Harbour Commissioners by Professor Oliver of University College London in 1916 [11]. The professor stated that, whilst he knew of no exactly analogous situations, comparison could be made with certain of the ‘dead ports’ of the north Norfolk Coast where silting up had seriously damaged navigation. The report went on to consider various options. These included making use of the extensive *Spartina* beds for paper making. A sample of the grass was harvested by school boys from Swanage and processed by a firm in London, the results being ‘sufficiently promising to deserve further investigation’. Chemical control was also considered, the report included a rather chilling comment regarding the necessary chemicals: ‘residues [of poisonous gas] will probably be obtainable at very cheap rate’ at the end of the [First World] War. The potential use of the plant in paper making to counter war-time shortages even made it into the local press. [12].



Fig 3 – *Spartina* colonising Holes Bay in 1913

4. The decline of *Spartina*

4.1 Strangely, not long after reaching its peak in Poole Harbour, *Spartina* began to retreat and by 1972 the area in Holes Bay had halved. The extent of the plant has also been reduced by infilling of the Harbour for infrastructure projects such as Poole Power Station and the Holes Bay Road. The combined effects of these processes by 1981 can be seen in Fig 4.



Fig 4 Extent of *Spartina* (shaded brown) in Holes Bay, left 1924 and right, 1981 [6] projected onto a modern map (contains Ordnance Survey data © Crown copyright and database rights 2018)

4.2 However, as Fig 4 shows, the reduction in the area of the plant was not uniform around Holes Bay and *Spartina* still formed a dense sward on parts of the northern shoreline. In 1985 it was even considered necessary to clear *Spartina* with a digger to create an area of open mud in front of the new bird hide built by the local members group of the RSPB (Fig 5).



Fig 5 Clearance of *Spartina* from in front of the bird watching hide in 1985.

4.3 In fact decline of *Spartina* along this part of the shoreline was limited probably until the 1990s. However, since then there has been a dramatic reduction in the area of *Spartina*. The extent of this recent decline can be seen by comparing the views of Holes Bay from Upton Country Park in the 1980s and 1990s with those of today as shown in Figs 6 and 7.



Fig 6 The view from the 'stone bench' – top installing a picnic bench in the mid to late 1980s. Bottom the view from the stone bench in 2014



Fig 7 Top – View from the Upton Country Park bird hide in 1993, looking to the right of the view shown in Fig 4 (the top photo also shows the disappearance of another prominent feature of the Holes Bay landscape – the power station chimneys) Bottom – A similar view in 2014

4.4 The reasons for the decline of *Spartina* seem to be complex and not fully understood [8]. It may be that as the dense stands develop the “soil” in which it grows comes to lack oxygen and this damages the plant. It is also vulnerable to erosion, invasion by other plants and is attacked by a particular type of fungus.

5. After *Spartina*

5.1 The relatively recent reduction in dense stands of *Spartina* on the northern shore of Holes Bay is obvious in some of the photos above; at low tide there are now extensive areas of open mud. However, other changes in the vegetation have also occurred. *Spartina* was also a component of the more diverse salt-marsh communities present. Two transects across the saltmarsh surrounding the shore-line trail boardwalk were set up in 1988. These were intended to monitor changes in the vegetation following the construction of the shore-line trail, which effectively excluded farm stock from the shore. Although, the saltmarsh was not systematically grazed at that time, stock (especially cattle) did have access to the shore. The transects were deliberately sited in areas where the vegetation was more diverse than in areas where *Spartina* dominated. The location of the southern transect is shown in Fig 8. This transect was 30 metres in length and the vegetation was recorded in 50 x 50 cm quadrats placed sequentially along the transect.



Fig 8 Position of the southern vegetation transect across the shoreline trail boardwalk at Upton Country Park

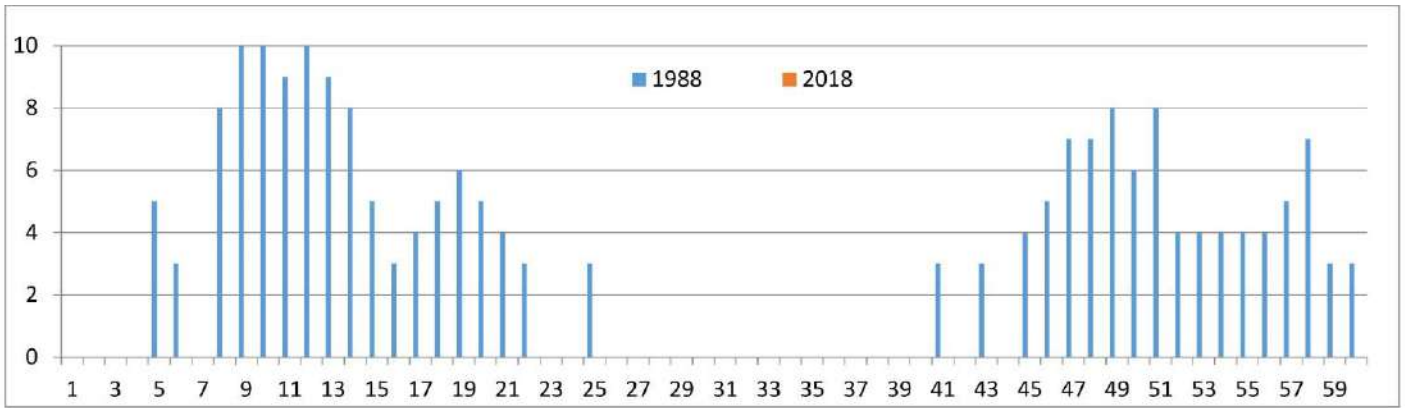


Fig 9a - *Spartina* – distribution and abundance along southern transect across shore-line trail at Upton Country Park

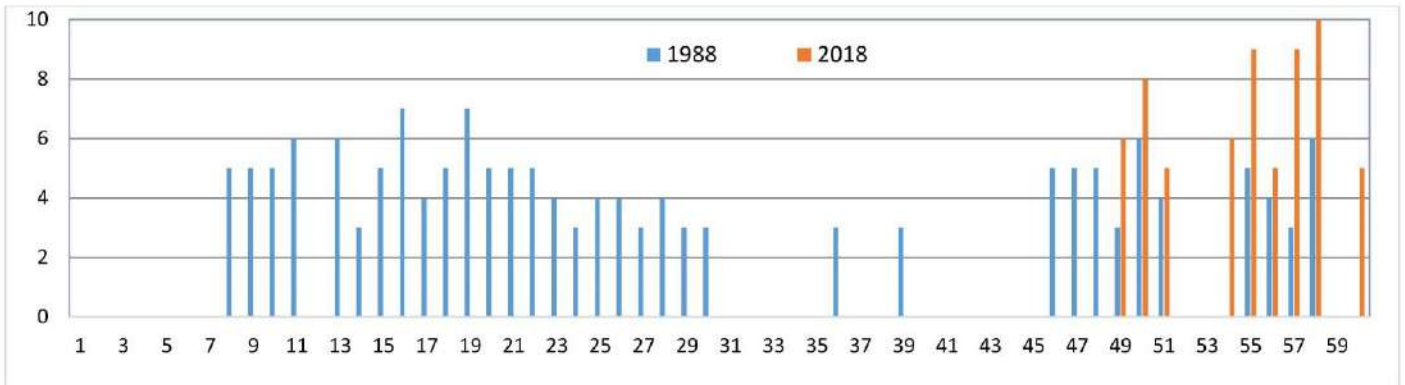


Fig 9b – distribution and abundance of bare ground along southern transect across shore-line trail at Upton Country Park

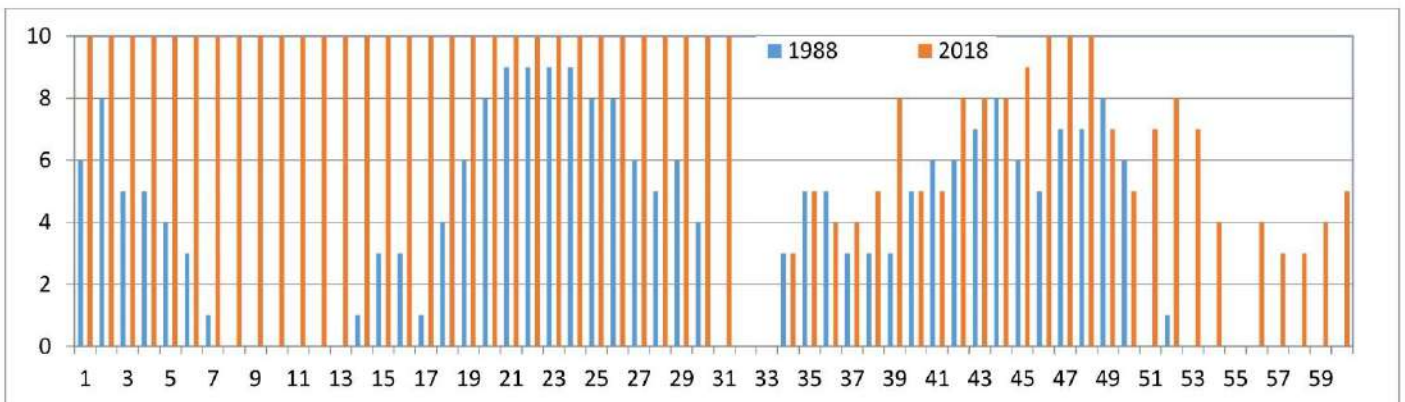


Fig 9c – distribution and abundance of Common Reed along southern transect across shore-line trail at Upton Country Park
 9a – 9c. Y axis approximate abundance as cover value (Scale: 1=1-2 plants, 2=<1%, 3=1-4%, 4=5-10%, 5=11-25%, 6=23-33%, 7=34-50%, 8=51-75%, 9=76-90%, 10=91-100%)

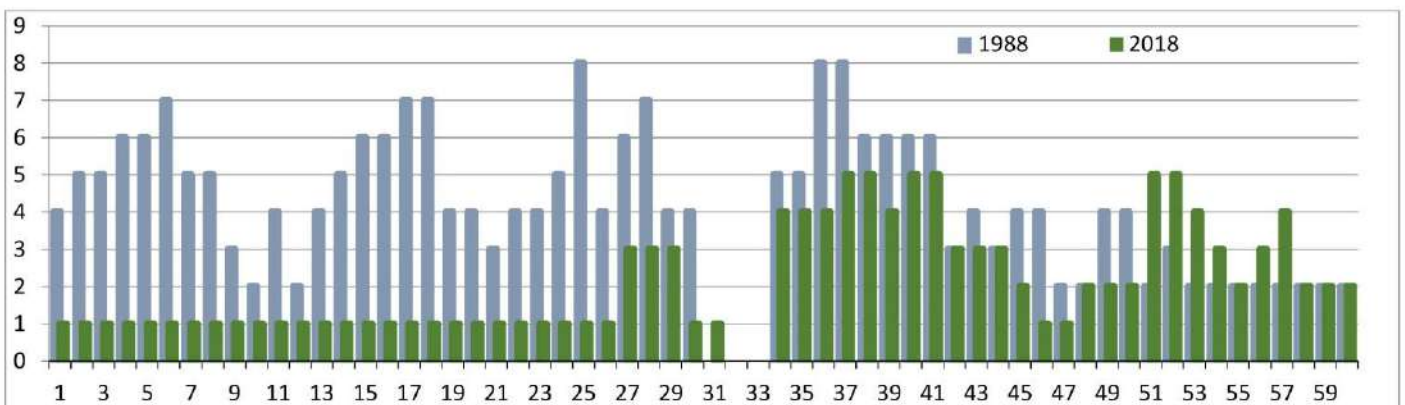


Fig 9d – number of species (Y axis) per quadrat along southern transect across shore-line trail at Upton Country Park

Fig 9 – results of southern vegetation transect in Holes Bay in 1988 and 2018 – quadrat number along transect on X axis. Note: board walk crosses transect around 32-34 m from start of transect

5.2 The transects were re-surveyed in 2018 and some of the results for the southern transect are shown in Fig 9. It can be seen that *Spartina* was present along much of this transect in 1988 but was not recorded at all in 2018 (Fig 9a). The extent of 'bare ground' had increased on the lower part of the transect in the same period, but had actually decreased on the upper part of the transect (Fig 9b). In fact the greatest change in the vegetation along the transect was the increase in the abundance of Common Reed (*Phragmites australis*), with the upper part of the transect being completely dominated by this species in 2018 (Fig 9c). The number of species recorded along the transect also changed (Fig 9d), with diversity dropping on the upper part – it has become a 'pure' reed-bed, with plants such as Sea Aster (*Aster tripolium*) and Spear-leaved Orache (*Atriplex hastate*) having completely disappeared. Further down the shore, although Common Reed had generally increased, it had not formed such a closed community and the marsh remained more open and diverse, with plants such as Sea Purslane (*Halimone portulacoides*) prominent and other plants including Sea Aster and Sea Arrow Grass (*Triglochin maritimum*) still present as well as bare ground.

5.3 It had been thought that Common Reed would increase. However, despite the well-known long-term decline of *Spartina*, the massive reduction in the plant as part of a mixed saltmarsh community, as shown on the transect, was not anticipated. Reed beds are good for wildlife – with birds such as Reed Warblers, Reed Buntings and Water Rail nesting in this habitat around Holes Bay. In this case the dominance of Common Reed has been accompanied by the loss of other plants (albeit fairly common ones). Whilst domestic stock grazing saltmarsh may be seen as 'unnatural', it has been pointed out that Aurochs (the original wild cattle) would probably have grazed such areas before man arrived on the scene. It has even been suggested, at some other sites, that loss of grazing has meant that interesting plant communities are 'succumbing to the tyranny of reeds' [9].

5.4 Another, hidden, indicator of vegetation change in Holes Bay is the existence of two concrete fence posts now hidden within a reed bed just north of the railway line (Fig 10). Old maps (Fig 11) suggest the railway embankment (which was constructed around 1893), was not fenced right across the Bay. As shown in Fig 11, the railway fence had a right-angled 'return' running parallel to the shore for around 10 metres, at this time most of the intertidal areas of Holes Bay were mapped as un-vegetated mud. Presumably, the small section of fence was enough to keep the most enterprising farm stock from crossing the soft mud to trespass on the railway. Later maps use the symbols for 'reeds' in this area clearly showing that the vegetation had changed, though the surveyors probably did not distinguish between Common Reed and *Spartina* on this type of map.

5.5 The decline of *Spartina* on the northern shore of Holes Bay in recent years has been a significant change in the vegetation. However, the area where *Spartina* once occurred has not simply reverted to bare mud. The changes are more complicated than that – in some areas the decline of *Spartina* may be accompanied by the expansion of the reed beds. It is even possible that the trapping of sediment by the initial expansion of *Spartina*, followed by the plants recent decline, has facilitated the expansion of the reed beds in Holes Bay. It is also likely that the vegetation will continue to change. Other factors such as sea-level rise due to climate change are likely to influence the vegetation in the future,



Fig 10 Concrete fence post in reed bed



Fig 11 Railway fence spurs shown on 1902 map (overlaid on modern aerial photo).

5.5 The condition of the railway embankment across Holes Bay is itself now a cause of concern. In 2017 around 400 tonnes of stone were used to repair the embankment [13] following surveys carried out on behalf of Network Rail. These found that locally generated waves and scour were exposing the base of the embankment. One option being considered is to encourage the regeneration of saltmarsh to protect the embankment from wave action [14]. This could include the use of silt dredged in Holes Bay at Cobbs Quay and the RNLi to provide suitable substrate for saltmarsh plants to grow in areas where *Spartina* has declined.

6. *Spartina* birds and bird watching in Holes Bay

6.1 The arrival of *Spartina* and the physical change in the habitat of inter-tidal areas must have had a big impact on the birdlife using the area. There seem to be few contemporary records of this but more recent academic studies do show the potential negative impact of *Spartina* on birds by reducing the area of open mud some species need to feed [e.g.14]. Although the relationship between birds and *Spartina* is complex, the Guardian newspaper, summed up the potential issue in an article entitled “What did for the Dunlin...strangled by Cord Grass” [16].

6.2 For the regular visitor to Holes Bay, the continual, but gradual, decline of *Spartina* along the shoreline may not have been very obvious. However the interpretation installed in the Upton Country Park hide built in 1985 (Fig 10) gives a graphic impression of how the landscape has changed (compare Figs 6 and 7 with Fig 10). All of the birds shown in illustration can be still be seen today – but there are some notable absentees in the 1985 art work including Little Egret and Wigeon. The Little Egret was considered to be a rare passage migrant prior to 1987, when it was first recorded wintering in Poole Harbour, with the first British record of breeding being on Brownsea Island in 1996 [17]. Its current frequent occurrence in Holes Bay is part of much wider change which has seen the species spread through the country.



Fig 12 Interpretative panel installed in Upton Country Park bird hide in 1985.

6.3 However, it is interesting that Wigeon was also not included on this panel (and did not get a mention in the Park's *Shoreline Trail Leaflet* published in 1987 either), although it did occur in 1985. It was described in a 2003 leaflet on the birds of the Country Park as a "...Common winter visitor to Holes Bay with counts of 100 made in the last few years; has greatly increased in numbers since 1980s" [18]. In fact, in recent years winter counts of this species in Holes Bay have now regularly topped 1,000 birds. Whilst the change in Wigeon numbers may not be directly linked to the decline in *Spartina*, numbers of many of the birds seen in north part of Holes Bay have increased greatly in recent years, as shown by the counts are made by volunteers undertaking the British Trust for Ornithology's Wetland Birds Survey (WeBs). The recent decline in *Spartina* in the northern parts of Holes Bay has certainly increased the number and variety of birds likely to be seen from vantage points such as the 'stone bench' and the site of the bird watching hide (a new hide is planned for this location in 2021).

7. *Spartina* – good or bad?

7.1 The rise and fall of *Spartina anglica* is an interesting story – an example of the evolution of a new species and its impact on a habitat important for wildlife. It has been seen as a useful way of stabilising mud flats and as a problem for both people and wildlife. It has been planted, sprayed with chemicals and dug up by people around the world. From the point of view of a bird watcher (or a Dunlin) the most recent phase of its demise in the Holes Bay is probably a good thing – though maybe not if you are a Network Rail engineer charged with maintaining the railway embankment.

7.2 *Spartina* can be regarded as an 'invasive non-native' plant, though it can also be seen as species endemic to Great Britain i.e. not 'naturally' occurring anywhere else [19]. It is generally assumed, that Smooth Cord Grass, its American 'ancestor', was introduced, perhaps by accident, by man to Southampton Water – though this has never been proven. It is just possible that its arrival was the result of natural processes [9]. Whatever its precise origins, for a relatively undistinguished plant, *Spartina* has had a big impact in Poole Harbour (and many similar sites around the world) and its 'rise and fall' has given it a back-story unlike any other plant found in Holes Bay.

Acknowledgements:

Fig 1 Llewellyn collection photo – source currently unknown (Assistance of Poole Museum Service acknowledged).

Fig 2 1913 photo of Holes Bay reproduced with permission of Bournemouth Natural Science Society

Fig 4 Map showing decline of *Spartina* in Holes Bay based on “*Spartina anglica* in Great Britain” by Pat Doody. Nature Conservancy Council 1984

Fig 12 Interpretation artwork from Upton Country Park bird hide painted by Tony Paul for the Poole and District Members Group of the RSPB, reproduced with permission of Tony Paul.

Vegetation transect carried out in 2018 with the help of Jez Martin.

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REPTILES AND LANDSCAPE CHANGE AROUND AND HOLES BAY

Nick Woods

1. INTRODUCTION

1.1 Today, Upton Country Park may not seem the most obvious place to look for reptiles. In fact, in the last thirty years all six of Britain’s native species, including the rare Sand Lizard and Smooth Snake (Figs 1 and 2) have been recorded in the area now forming Upton Country Park. This article looks at the known distribution of reptiles around Holes Bay in relation to the landscape history of the area. It looks at how changes in the landscape are likely to have effected reptile distributions and considers what future reptiles may have in the area around Holes Bay.

1.2 Upton Country Park is now the largest area of undeveloped land around Holes Bay and was once part of a thousand acre estate stretching from Hamworthy, through Creekmoor and Broadstone to, what is now, Corfe Hills School. The estate was developed around Upton House, built about 1816, by Christopher Spurrier, a wealthy Poole Merchant. The Spurrier family had acquired farmland at Upton and purchased additional areas of heathland from the Canford Inclosure Award Commissioners at around the same time. Subsequent owners of the estate also purchased land and much of the area remained in private ownership until 1957 when Poole Council was gifted approximately 55 acres of land by the then owner, William Wigan Lewellin. In 1987 much of what remained of the estate (including Upton Park Farm) was purchased by the Borough of Poole, with some of this land incorporated into the Country Park in subsequent years. In contrast, much of the remaining shoreline of Holes Bay has been developed, by infilling (e.g. for Poole Power Station and the Holes Bay Road) or, on the south-west side of the Bay, for housing.



Fig 1 Sand Lizard - present in the Roper’s Lane area till at least 2004



Fig 2 Smooth Snake – present in the Roper’s Lane area till at least 1996

2. HISTORIC REPTILE RECORDS AT UPTON COUNTRY PARK

2.1 A summary of the known reptile records in and around Upton Country Park is given in Table 1

Slow Worm	1980-1983 recorded in the area then managed as Upton Country Park – no further details (UCP) 2001 – 2 records from ‘newly fenced reptile area’ [adjacent to Roper’s Lane footpath] (UCP) 2002 – 5 records of up to 6 animals (including young) under a single refugia in Roper’s Lane reptile area with at least 11 present on one occasion (UCP/NW) 2003 – 6 records from Roper’s Lane reptile area (UCP) 2004 – 2 records from Roper’s Lane area (NW) 2007 – 4 records of 1, 3, 7 and 20 animals under refugia at Roper’s Lane (NW) 2008 – 1 record of 6 animals under refugia at Roper’s Lane (NW) 2009 – 1 record totalling c 8 animals under refugia at Roper’s Lane (NW) 2011 - 1 record of 5 adults and 3 young under tin at Roper’s Lane (NW)
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	2012 – 2 records from Roper’s Lane reptile area – including one record of 10 animals under 1 tin and one of a total of 20 animals (UCP/NW) 2014 – 1 record for Roper’s Lane field (NBN)
Common Lizard	1984 – recorded as an ‘additional species’ for Upton Country Park – in Kennel Mead/Gardens area (UCP) 1990 – 1 record - rescued animals put on log pile in Kennel Mead area by Doug Mills (UCP) 1992 – 1 record - on log pile in Kennel Mead created in 1990 (UCP) 1993 - 2 records of animals on log pile in Kennel Mead created in 1990 (UCP) 1997 – 1 record – single animal - along shoreline near to site of former of Bird Hide (NW) 2000 - 1 record of ‘green lizard’ thought to be this species on cycleway in Park (UCP) 2003 – on south edge of tree screen in front field reported by UCP staff (UCP)
Sand Lizard	1990 – lizard, probably Sand Lizard, along shoreline at NE gate to Park (UCP) 1996 – 1 record at Roper’s Lane (NBN) 1997 – 2 records at Roper’s Lane (NBN) 1999 – 1 record of 1 animal along Ropers Lane footpath c from half way from Allen’s Lane to Roper’s Lane (NW) 2004 – 1 record Roper’s Lane (NBN)
Grass Snake	1985 – recorded as an ‘additional species’ in 1985 (UCP) 1990 – 2 records of ‘baby’ animals – one in basement of Upton House and 1 by tool shed (UCP) 1996 – 1 record Roper’s Lane area (NBN) 1997 – 1 record Roper’s Lane area (NBN) 1999 – 1 record ‘near Upton Country Park’ – probably Roper’s Lane area 2000 – 4 records of single animals near Bascombe’s pond and near Heritage Centre, now the tearooms (UCP) 2001 – 1 record – dead at main entrance (UCP) 2002 – 6 records – all relating to reptile area near Roper’s Lane (UCP) 2003 – 3 records 2 near Roper’s Lane footpath and one on front field/east field north end (UCP) 2004 – 2 records (no details) Roper’s Lane area (NBN) 2007- 3 records all in reptile area near Roper’s Lane (NW) 2012 – 1 record near Roper’s Lane (UCP)
Adder	1983 – recorded as present between 1980 and 1983 with no details (UCP) 1984 - snake probably this species in works yard near pigsties (UCP) 1999 - report of snake – thought to be an adder at duck pond (UCP); report of adder on 7/7/1999 in grid square SY9992 – most of this square covers Upton Country Park (NBN)
Smooth Snake	1996 – 1 record at Roper’s Lane (NBN)

Table 1 – Historic reptile records for Upton Country Park (UCP = records from Upton Country Park, NBN = records from National Biodiversity Network, NW = records from Nick Woods)

2.2 Most the known records, are casual observations and it is thought that there has never been a comprehensive, systematic survey of reptiles for the Upton Country Park as a whole. The few records for the rarer species (and many of the Slow Worm and Grass Snake records) are from the ‘reptile area near Roper’s Lane’. This was an area of approximately 0.75 ha taken out of the tenancy of Upton Park Farm in 2001, following the discovery of Sand Lizard and Smooth Snake in this area (in addition to records of Slow Worms and Grass Snakes). The approximate location of this area is shown in Fig 4. Following removal from the farm tenancy, the area was managed with the aid of the Herpetological Conservation Trust (now the Amphibian and Reptile Conservation Trust) to encourage reptiles. The area was subsequently incorporated into the Upton Country Park SANG (suitable alternative natural greenspace) in 2015.

3. REPTILES AND LANDSCAPE HISTORY – THE ROPER’S LANE REPTILE AREA

3.1 The strong association of both Sand Lizard and Smooth Snake with lowland heathland is well known, as is the huge decline in the area of such habitat in historic and recent times [1]. The extent of this decline around Holes Bay can be seen by comparing the 1st edition of the 1 inch Ordnance Survey map of the area, published in 1811 (Fig 3) with a modern aerial photo (Fig 4). At the time this map was drawn up, Poole was a relatively small town, though to the east of Holes Bay, the areas of Longfleet and Oakdale were mainly farmland, permeated by a network of winding



Fig 3 1st edition Ordnance Survey 1 inch to the mile map published in 1811 based on surveys carried out in 1805-1807. Composite image of published sheets 15 and 16. Approximate location of 'Roper's Lane reptile area' shown by red arrow.

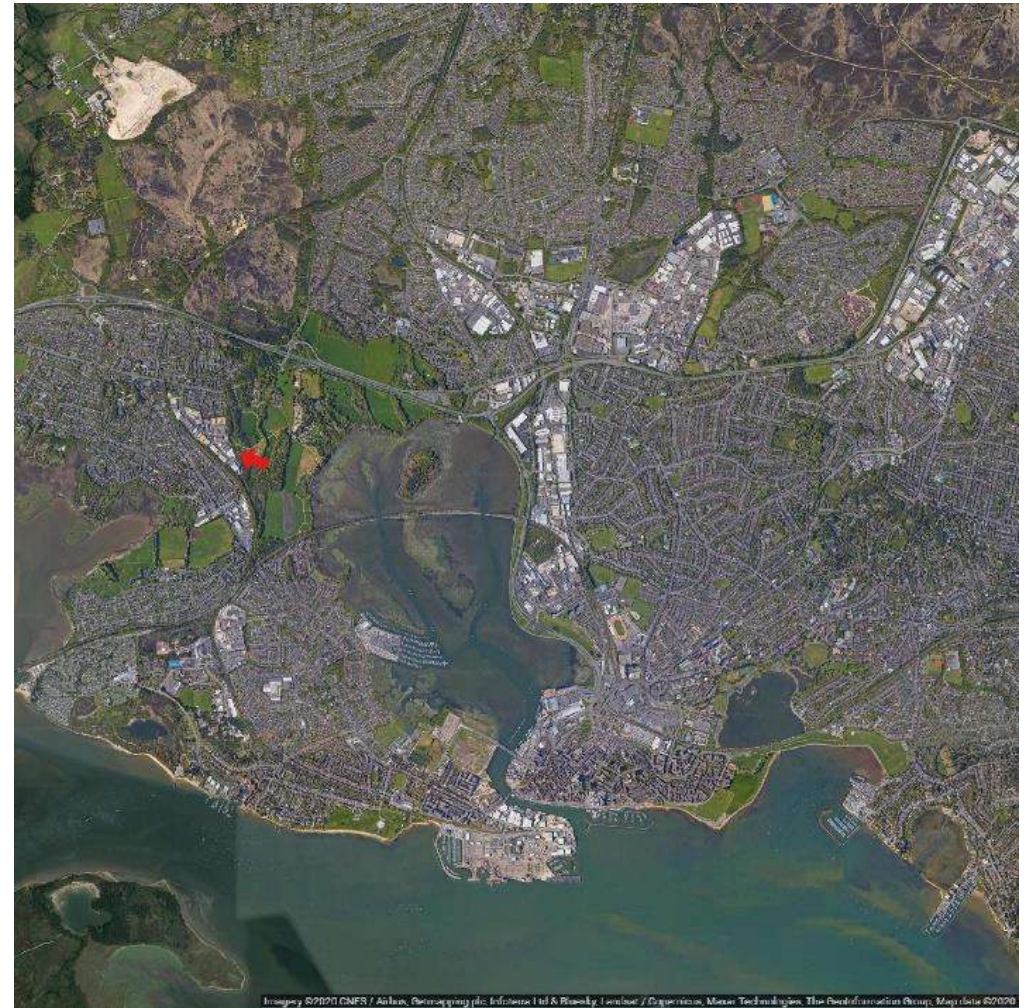


Fig 4 Recent Google satellite photo of area shown in Fig 3. Approximate location of 'Roper's Lane reptile area' shown by red arrow.

lanes. Although the published Ordnance Survey Map does not show field boundaries, the original surveyors' drawing in the British Library [2] indicates the existence of a dense mosaic of small fields between these lanes. The farm at Upton has also been established for a long while. The first documentary record for a farm goes back to the early seventeenth century [3] and archaeological finds suggest there may have been a farmstead in the area in medieval times, with pottery from thirteenth-fourteenth and tenth-twelfth centuries found close to the shoreline in 2017 [4]. However, Fig 3 shows that, in the early nineteenth century, on the west side of Holes Bay, there was almost continuous heathland or similar vegetation (suitable for Sand Lizard and Smooth Snake), from 'Ham Heath' (what we call Ham Common today) to 'Lytchett Common' (Upton Heath).

3.2 What was later to become 'the reptile area at Roper's Lane' was within this area of heathland and the 1811 map shows a track from Hamworthy in Upton. This track probably follows the line of a pre-turnpike, and possibly medieval, road [5]. This was superseded as the main route between Hamworthy and Blandford by what is now the Blandford Road, but, crucially, left the old track in place, later to be identified as a public footpath. In 1843 this track crossed an area of heath known as [Hamworthy's] 'Outer Common' [6]. The area to the east of this track was incorporated into the Upton Estate c 1910 [7], and was probably still heathland at that time. Although much of this land was improved for agriculture, especially near the stream, it retained the field name 'Ham Common' till at least the 1960s [8], and the track itself was excluded from the area let to the estate's tenant farmers. In the early 1930's the first Land Utilisation Survey shows that despite urban growth, conversion to farmland and tree planting (mostly forestry) in the area there was still almost continuous 'heath, moorland, commons and rough pasture' in this area [9].

3.3 In the early 1990s the banks of the old road still supported some remnant heathland (Fig 5), with both Western Gorse (*Ulex galli*) and Bell Heather (*Erica cinerea*) still present (Fig 6). The track was fenced from stock in the neighbouring fields (Fig 7) which at times included pigs – probably not very conducive to the survival of reptiles. The discovery of both Sand Lizard and Smooth Snake in this area with some suitable remnant habitat led to the establishment of the 'Roper's Lane reptile area'.



Fig 5 track of old road, looking south to Roper's lane in early 1990s. Farmland of Upton Park Farm to left of bank.



Fig 6 Remnant heathland on bank beside old road – early 1990s



Fig 7 Agricultural use of fields adjacent to old road (note – pig shelters) – early 1990s

3.4 The presence of the two rarest UK reptiles in this area up to the early 1990s can thus be explained by the survival of this small area of relict habitat. The retention of the habitat being due to the relatively late date of agricultural improvement and the fact that the old road itself was never incorporated into the new fields. Some reptile species can also be relatively long-lived. Individual Smooth Snakes are reported to have survived for at least eighteen or so years on Studland Heath and, in the Netherlands, Sand Lizards have been found to survive up to twelve years of age [10].

4. UPTON COUNTRY PARK 2020 REPTILE SURVEY

4.1 In 2020 it was decided to carry out a limited reptile survey in Upton Country Park. The intention was to try to establish which species were still present and whether a reptile survey using felt mats as refugia was practical in an

area subject to heavy public use. A total of seventeen mats were placed in suitable areas of scrub/long grass in various parts of the Park in late May and early June. The majority of these were placed in or near the land managed as the 'Roper's Lane reptile area'), though a few were placed in other parts of the Park in the hope of demonstrating reptile presence over a wider area; the approximate locations of the mats are shown in Fig 8. The mats were checked for reptiles on average at least once a week until the end of September 2020, with a visual check for basking reptiles (not all species regularly use refugia) also being made.



Fig 8 Approximate location of reptile survey mats in 2020 survey and species found

4.3 The only species recorded in the survey were Slow Worms (Fig 9) and Grass Snakes (Fig 10), with Slow Worms being recorded on sixteen dates at 8 of the mats and Grass Snakes on 8 dates at 4 of the mats. The distribution of these records is also shown in Fig 8 and these suggest that both these species are widespread and frequent on the western side of the Country Park. All the positive records were in or near the former 'Roper's Lane reptile area'. No animals were found under the mats placed elsewhere. Whilst the absence of Smooth Snake and Sand Lizard records in the 2020 survey does not prove that these species are absent, given the limited amount of suitable habitat and the few records from the 1990s, this does seem likely. The few previous records for Adder and Common Lizard (see Table 1) were widely scattered around the Park, and these species do not seem to have been recorded from the area near Roper's Lane. However, the very low numbers of mats placed in other parts of the Park, mean that no firm conclusions can be drawn regarding the presence or absence of these or other species in the area away from Roper's Lane.

4.4 The 2020 survey was partly intended to see how practical it would be to use mats for a reptile survey in a heavily used Park. Only one mat disappeared due to apparent vandalism and, although mats were deliberately sited to be inconspicuous, this does suggest a more extensive survey would be practical. It is hoped that more comprehensive surveys will be carried out in future, perhaps as part of the Heritage Lottery Funded Discovery Project at Upton Country Park.



Fig 9 Three Slow Worms found under a felt mat in the 2020 survey at Upton Country Park.



Fig 10 Grass Snake found under a felt mat in the 2020 survey at Upton Country Park

5. REPTILES AT OTHER SITES AROUND HOLES BAY

5.1 Although, prior to the 2020 survey, there had probably been no systematic reptile survey in Upton Country Park, surveys are carried out to inform the planning process when sites are developed or other works planned. Using seven such surveys, some idea of the presence (or otherwise) of reptiles on several individual sites around Holes Bay can be gained (see Table 2 with survey locations shown on Fig 11).

Site	Date	Reptiles recorded	Notes including surveyors' comments	Ref
1- Former Poole Power Station	2006	Common Lizard (433 animals removed) Slow Worm (63 animals removed)	Described as a 'key reptile site' due to the number of animals present (some of the Slow Worms may have been previously re-located to the power station site from a nearby area)	11
2 - Land at Sterte Avenue West	2019	No reptiles recorded	Suitable habitat for Slow Worm, Common Lizard and possible Grass Snake and Sand Lizard on site – absence thought to be due to isolation and lack of connectivity to surrounding habitats and history of area	12
3 - Land adjacent to Sterte outfall (Holes Bay Road)	2015	No reptiles recorded	Preliminary appraisal of habitat suggested possible presence of one and possibly two or three reptile species; Common Lizards and Slow Worms known to be present along railway lines adjacent to Sterte Road. Absence of reptiles thought to be an artefact of habitat fragmentation.	13
4 - Land at Fleets Channel	2015	No reptiles recorded	See site 3	13
5 - Land adjacent to Creekmoor tidal channel	2013	No reptiles recorded	Initial assessment suggested site could support hundreds of reptiles, with several species expected and any of the six native species potentially present... Site contains an abundance of reptile-friendly habitat...however the site's heavily modified character and isolation have left it devoid of reptiles	14
6 - Marshes End	2015	No reptiles recorded	Habitat suitable for common species of reptile but isolated from neighbouring land which could support such species	15
7 – land at Harkwood Drive	2019	1-2 Slow Worms recorded under 6 refugia	Narrow strip of largely formal open space between residential development from the late 1960s and the edge of the harbour, some scrub remaining	22

Table 2 Recent reptile surveys on sites close to Holes Bay (see Fig 11 for locations)



Fig 11 Sites surveyed for reptiles prior to development or other works (see table 2)

5.2 The sites on the east side of the harbour and the power station site were all 're-claimed' from the harbour i.e. the harbour was filled in for development. The Power Station (site 1) was the earliest of these sites to be re-claimed, in 1946. Site 7 (the former Harkwood Farm) was developed in the late 1960s. Sites 4,5 and 6 were re-claimed in the early 1970s and sites 2 and 3 in the 1980s [16]. The Power Station was decommissioned in 1982, and this was followed by a protracted demolition (the iconic chimneys only coming down in 1993) and much of the site is still to be redeveloped. The Power Station site is a large site and has also been in existence for a much longer period than the other sites listed in table 2 (with a long period out of use as well). This explains how large populations of Common Lizard and Slow Worm were able to build up there. Site 7 was the next to be developed but did retain the existing shoreline with some areas of semi-natural vegetation nearby and Slow Worms were found there in 2019. In contrast, the newest sites in table 2 (sites 2-6) have not (as far as is known) been colonised by any species of reptile, despite suitable habitat often now being present. It makes sense that this is due to the lack of nearby populations to colonise these sites, and by the barriers that modern roads and the character of development make to reptile movement.

6. CONCLUSIONS

6.1 This article has been based on records known to the author and other sources of records, e.g. The Dorset Environmental Records Centre, have not been accessed. There may be additional reptile populations, at least of the common species, around Holes Bay. However, from the information used to produce this account, it is likely that Sand Lizard and Smooth Snake are no longer present and unclear if Common Lizard and Adder (Figs 12 and 13) still occur at Upton Country Park. The large Common Lizard colony at the power station site is effectively being relocated to facilitate development.

6.2 The current distribution of reptiles around Holes Bay seems to reflect the history of the landscape, and in particular, the continuity (or otherwise) of suitable habitat, over varying time scales. Hence, until relatively recent times both Sand Lizard and Smooth Snake were still found on the west side of what is now Upton Country Park. The large colony of Common Lizards and also the Slow Worms found on the Power Station site, probably reflect the

length of time this area had escaped re-development, largely due to the constraints of this brown-field site. The absence of reptiles from a number of sites around Holes Bay (despite the presence of suitable habitat) can be explained by the relatively recent nature of these habitats on filled ground and the barriers (such as the dual carriageway) between such sites and suitable sources of colonising animals. It is perhaps slightly ironic that the existence of an 'old road' to the south of Roper's Lane may have helped even the rarest reptiles survive there until relatively recently, but the modern equivalents elsewhere may prevent colonisation of suitable habitat even by the commoner species.



Fig 12 Common Lizard – a large colony was present into the 2000s on the site of Poole Power Station



Fig 13 Adder – previously recorded from Upton Country Park, but not known if still present around Holes Bay

6.3 It is generally thought that all native reptile species are declining in Britain [e.g. 17] and all species are now listed as UK Biodiversity Action Plan priority species, most added when the list was updated in 2007 [18]. Nationally, it is thought that the Adder is declining in many parts of the country [20], especially perhaps where it exists as small populations [21]. The surveys listed in table 2 are an indicator of the efforts made to conserve these species, (even those regarded as relatively common). Where sites occupied by these species are threatened by development considerable efforts are made to translocate the animals to suitable sites, as has happened at the Power Station site, where the Common Lizards and Slow Worms have been relocated to a suitably managed area at Mannings Heath. Although, despite such efforts, animals translocated do not always establish new populations in the recipient sites [19].

6.4 Although a substantial area of existing or potential reptile habitat will be lost when the Power Station site is re-developed, an even greater area of land has been taken out of agricultural use at Upton Park Farm to form the SANG. The principal purpose of the SANG is to relieve recreational pressure on protected heathland sites. However, this area still supports at least two species of reptile and possibly more. The expanded Upton Country Park, and other areas of suitable habitat around Holes Bay, have the potential to support good populations of, at least, the commoner species of reptile. However, the extent to which this will happen will probably depend on whether the animals can overcome the barriers the modern landscape presents to the colonisation of such areas.

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