

YELLOW-LEGGED GULLS IN DORSET

Ian Stanley

Abstract

At the turn of the 21st century, Poole Harbour was one of the very few localities in the UK to hold large concentrations of post-breeding Yellow-legged Gulls, the period 1997 to 2003 in particular producing the highest counts, peaking in an estimated 500+ present in 2001. A breeding attempt took place in 1995, which constituted the first occurrence of a non-mixed pair in the UK. Breeding continued until 2016, with a maximum of three pairs in 2001.

Taxonomy and status in Europe

The Yellow-legged Gull *Larus michahellis* comprises two subspecies spanning different distributional ranges, nominate *L. m. michahellis* (Yellow-legged Gull) breeding throughout the Mediterranean basin and the south-western coasts of Europe, and *L. m. atlantis* (Atlantic or Azorean Gull) from the Azores, which is often treated as a full species by some authors. Birds from the Canaries, Madeira and north-west Africa share some features of *atlantis*, and are often included within that form. Western Iberian birds show subtle differences from typical Mediterranean *michahellis* and are sometimes separated as *L. m. lusitanus* (Cantabrian Gull). Identification of all these forms can be problematic, but a review of the subspecific taxonomy is likely in the future (Collinson *et al* 2008, Olsen 2018).

In the Mediterranean, the breeding population of *michahellis* has increased dramatically in recent decades, and was estimated at half a million pairs in 2015 (*Birdlife International* 2021). The gull's opportunistic behaviour and omnivorous diet allows them to take advantage of human activities such as refuse landfill and industrial fishing (Bellout *et al* 2021). Previously considered a generally sedentary species prior to the 1970s, nominate *michahellis* is now a relatively common post-breeding moult migrant to north-west Europe from July to December, expanding its breeding range to these areas, often in mixed pairs with both Herring Gull and Lesser Black-backed Gull.

The first Dorset records

Occasional reports of 'yellow-legged' Herring Gulls prior to the 1980s, for example at Portland Bill on 16th April 1976 could well have referred to *michahellis*, although were described as local variants at the time. The first confirmed record involved single adults at Radipole Lake, Weymouth on 11th & 16th January 1980, followed by another adult at Stanpit Marsh, Christchurch Harbour during August-September 1981 (Green 2004).

The increasing European breeding population combined with an increase in both observer interest and identification awareness resulted in annual occurrences, with the majority of records from well-watched sites such as Radipole Lake, Lodmoor and Christchurch Harbour. A seasonal trend began to develop, with a late summer/autumn influx noted in some years at coastal sites including 6 at Radipole Lake in July 1985, although the majority of records came from the winter period, perhaps indicative of the traditional gull-watching habits of observers at that time. A long-staying individual at Poole Park returned in all but one winter from 1982-1988.

Poole Harbour

The early 1990s gave the first evidence of a dramatic shift in status as small concentrations in Poole Harbour became evident, including counts of up to 11 in Brand's Bay in early October 1992. Holes Bay then began to hold regular numbers from 1993, being present throughout July until October that year, with a maximum of 39 on 16th August. This late summer/early autumn gathering was repeated over the following years, gradually increasing into more substantial three-figure counts such as 160 in August 1997, 220 in August 1999, 307 in Sept 2000, and peaking to a maximum site count of 312 in September 2001.

The birds gathered to loaf on the factory roofs on the eastern shore of Holes Bay, especially by the Kerry Foods factory, where refuse bins containing manufacturing waste from pies and pastries proved particularly attractive. It was possible to observe the feeding melee around the waste bins

from relatively close range, and the combination of the sight of the scrapping gulls, the sound of *Michahellis* long-calls, and the aroma of decomposing sausage rolls in the late summer sun, provided an unforgettable experience.



Yellow-legged Gulls and Herring Gulls at Kerry Foods - 30th July 2003 - Ian Stanley

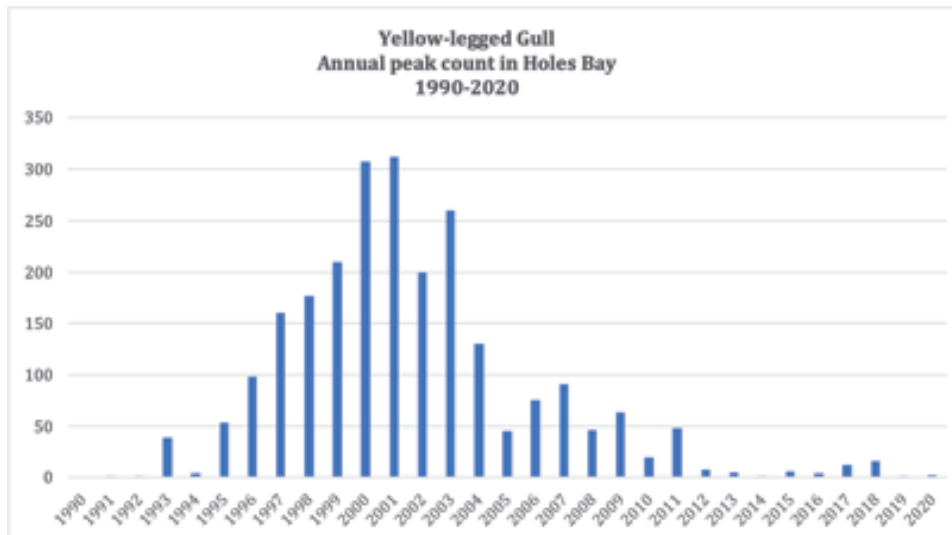
The nearby inter-tidal areas of Holes Bay provided suitable bathing and resting opportunities and the gulls would also feed here, out on the algal bloom covered mudflats at low-tide. Although gulls are usually gregarious species, the Yellow-legged Gulls would form species-specific flocks, few of the otherwise locally abundant Herring Gulls would be prepared to join either for feeding or loafing, the Yellow-legged Gulls appearing the dominant species.

Gulls would begin arriving from the last week of June, non-breeding immatures usually being the first to arrive on site (of 26 on 28th Jun 1998 just three were adults, the rest comprised of ten 2cy, ten 3cy and three 4cy). Adults would then begin to arrive in numbers, quickly followed by the first juveniles towards mid-July. Counts generally peaked between mid-August and early September, before numbers would drop off into the autumn. It could often be difficult to complete an accurate count as birds would rest on both sides of the factory roofs with many out of view, and others would be out in the bay or at other locations across the harbour depending on the tidal state.



Adult Yellow-legged Gull - Swineham GP - 4th August 2004 - Ian Stanley

At this time almost any location within Poole Harbour could produce Yellow-legged Gulls, but some sites were particularly favoured including Lytchett Bay (a max count here of 65 in August 1997) and the Swineham area, where new gravel workings and the nearby mudflats of the Wareham Channel held 141 on 3rd Jul 2001 and 150 on 29th Jul 2001. Given the numbers indicated above and the difficulties at times in producing accurate counts, it was estimated that in late summer 2001 the numbers of Yellow-legged Gull using the greater Poole Harbour area was in the region of over 500 birds.



	Holes Bay	Lytchett Bay	Middlebere	Swineham
1990	0			
1991	1			
1992	1			
1993	39	9		
1994	4	11		
1995	53	10		
1996	98	23		
1997	160	65	5	10
1998	177	22	1	12
1999	210	20	3	2
2000	307	20	15	60
2001	312	23	50	150
2002	200	7	7	6
2003	260	15	0	40
2004	130	10	34	45
2005	45	16	18	7
2006	75	21	9	14
2007	91	16	19	98
2008	46	17	20	7
2009	63	15	91	4
2010	20	9	14	8
2011	48	14	11	64
2012	8	8	60	5
2013	5	6	10	6
2014	1	4	10	48
2015	6	6	12	6
2016	4	4	9	4
2017	12	12	29	8
2018	16	4	0	5
2019	1	2	1	2
2020	3	1		4

Yellow-legged Gull: peak counts at main Poole Harbour sites 1990-2020

The decline

From 2004 a gradual fall in numbers present slowly became apparent, peak counts in Holes Bay fell from 130 in 2004 to 46 by 2008. Coordinated counts in 2007 (Hopper 2008) produced a total of 170 across the Harbour on 31st July, followed by 114 on 31st August indicating that the decline from the peak numbers just six years earlier was genuine and not influenced by under recording. Some relatively large counts were occasionally reported from other sites, including 48 at Swineham on 30th August 2014, but few counts were made elsewhere and just a single figure presence was the norm in Holes Bay by the mid-2010s. An encouraging increase to 16 in Holes Bay on 23rd Aug 2018 was the largest number there for seven years, but in 2020 a maximum of just 2 were reported, with 4 at Swineham.

The decline in numbers of Yellow-legged Gulls using Poole Harbour is very likely due to changes in disposal of both residential and commercial food waste, with most now composted rather than put into landfill. Beacon Hill Landfill began to actively discourage gulls through netting or falcon flying in the mid-2000s, and it appeared Kerry Foods changed their waste disposal methods too. As many gull species including Yellow-legged Gulls are opportunistic foragers dependent on food resources such as landfills, changes in food availability can quickly influence distribution and populations (del Hoyo 1996), and as the attraction of the Poole area diminished, it appeared the gulls simply moved elsewhere.

A similar long-term decline has also become apparent at other locations in the UK that had previously attracted Yellow-legged Gulls in large concentrations, including sites such as Eling in Hampshire (peak count 178 in 2007 - Hampshire Bird Report), Rainham Marshes (peak 163 in 2014 - London Bird Report) and East Tilbury/Mucking in Essex (peak of 450 in 1996 - Birds of Essex 2016). A move inland away from the southern and south east coasts has also been noted in recent years with 50+ counts at some southern Midlands and East Anglian sites, with gulls often utilising the few remaining landfill sites and pig farms for feeding, with the larger reservoirs such as Grafham and Draycote Waters providing safe roosting.

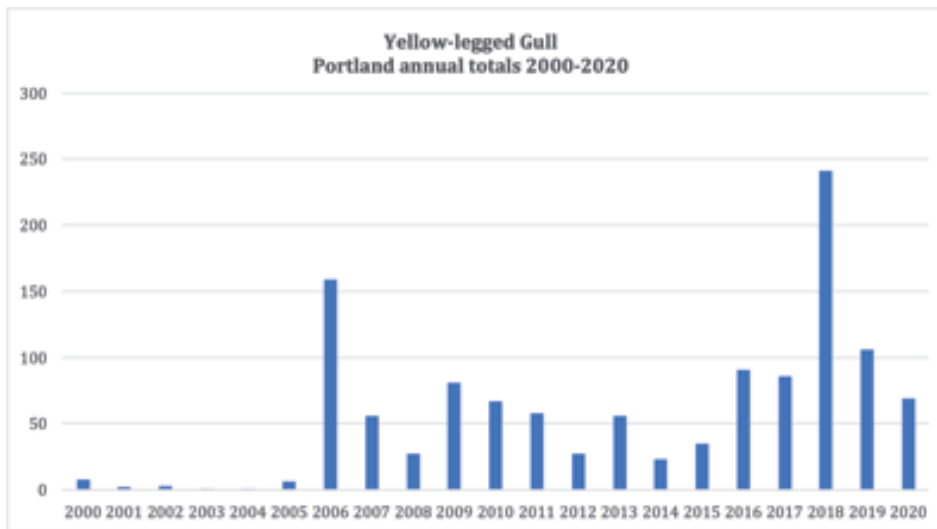
Elsewhere in Dorset

Away from Poole Harbour, the majority of other records at this time were concentrated at well-watched coastal localities in Weymouth and Christchurch Harbour, and although involving low single-figure counts, mostly followed a similar seasonal pattern. Some sites attracted returning individuals over several years, notably at Lytchett Bay, Poole Park, and Stanpit Marsh (2002-2007), but all were outdone by a remarkable long-stayer at Abbotsbury Swannery which returned each year from 1990 until 2008.

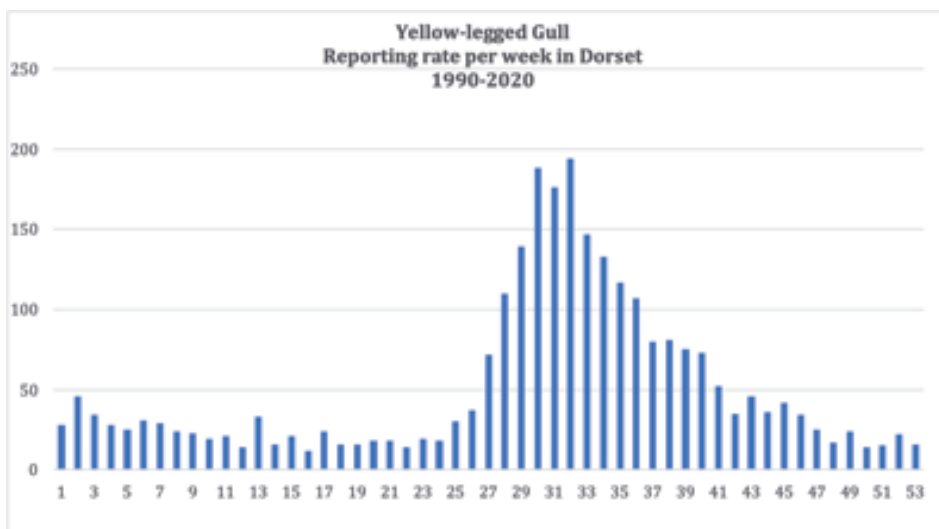
The Beacon Hill Landfill at Corfe Mullen would produce Yellow-legged Gulls throughout the year although it was often difficult to accurately count at this site amongst the throng of gulls present and were perhaps under-recorded. Maximum counts included 42 on 27th Oct 2001, and 46 on 27th Sep 2002. Winter counts included 14 on 6th Jan 2001. Fields used for pig farming often attract gulls in numbers, and a farm near Witchampton proved particularly popular in 2001, with counts of 150 on 25th Aug and 49 on 8th Sep. Few were found inland away from the pig fields, although occasional records from sites such as Puddletown and Sturminster Marshall GP were noted as gulls followed the Frome and Stour Valleys away from Poole Harbour.

Arrival of juveniles in 2006

Although the decline of post-breeding flocks within Poole Harbour continued, an arrival of juveniles was recorded elsewhere in more widespread locations. Portland in particular witnessed an unprecedented arrival of juveniles in 2006, with an annual total of 159, the species status changing from rare visitor to familiar post-breeding migrant in just a few weeks (Portland Bird Report 2006). The following years produced slightly lower numbers, but the status change remained, eventually resulting in a record day count of 28 on 24th July 2017, and a record annual total of 241 in 2018.



This pattern was repeated across the Dorset coastline, some sites recording impressive numbers of juveniles, such as the 10 at Cogden Beach on 8th Aug 2018. Compared to the adults who seem to head directly to their traditional post-breeding haunts, juveniles arrive on a broad front and can be encountered at any coastal site. Favoured localities at this time include Abbotsbury, Christchurch Harbour, Lodmoor, Radipole and West Bexington. The typical week of arrival for the first juveniles is around the first week of July, with the earliest reported arrival date in Dorset the 29th June at Wick, Hengistbury Head in 2012.



Origin of Yellow-legged Gulls in Dorset

Colour-ring reads of Yellow-legged Gull in the UK are relatively rare events, those that have been recorded are mostly from the northern shores of the Mediterranean, usually from colonies in France and Italy (BTO). There have been just five reported ringing recoveries in Dorset, three of these involving the same individual at two sites over seven years. The West Bexington record was just the third from Spain to be found in the UK. The recoveries indicate *michahellis* Yellow-legged Gulls undertake a north-westerly dispersal to reach Dorset, leaving the breeding grounds soon after fledging and moving towards the Atlantic.

Radipole Lake

2CY on 16th Dec 2003 was ringed at the nest at Lagune des Impériaux, Bouches-du-Rhône, France on 24th May 2002, a movement of 949km NNW. It was later noted as an adult at Holes Bay on 31st Aug 2007 and then again back at Radipole Lake on 22nd Oct 2010.

Holes Bay

3CY on 2nd Oct 2004 was ringed at the nest at Valli di Comacchio, Ferrara, Italy on 2nd Jun 2002, a movement of 1255km WNW.

West Bexington

1CY on 23rd Jul 2018 was ringed at the nest at Illa de L'Aire, Menorca on 5th May 2018, a movement of 1325km NNW.



1cy Yellow-legged Gull 'Red B5E7' - West Bexington - 23rd July 2018 - Mike Morse



Breeding colony sites (yellow stars) of colour-ringed Yellow-legged Gull later found in Dorset

Breeding in Dorset

Yellow-legged Gulls made occasional appearances on Brownsea Island Lagoon in the early 1990s, but a breeding attempt in 1995 was unexpected, and constituted the first confirmed breeding in the United Kingdom (www.rbbp.org.uk). Breeding continued in every year until 2017 when one of the adults disappeared. A second pair attempted to breed in at least four years from 1997-2001. In 2001-2003 a further pair nested on the nearby Sandbanks peninsular. A total of 20 young were fledged successfully. The Brownsea pairs nested on the eastern side of the lagoon by the seawall and with the lagoon hosting significant colonies of Common and Sandwich Tern, the eggs and young of the terns provided a plentiful food source.



The pair of adult Yellow-legged Gulls that attempted to breed at Sandbanks
11th April 2002 - James Lidster

Breeding events at Brownsea Island and Sandbanks 1995-2018:

- 1995 One pair bred, noted feeding one young on 14th May, but was not seen subsequently despite checking, and was presumably predated. A second pair was also present.
- 1996 One pair bred with two chicks hatching, but both were predated.
- 1997 Two pairs bred, one of which fledged two young.
- 1998 Two pairs bred, with three young noted in July.
- 1999 One pair bred and hatched two young on 17th May. Both had fledged by 30th June. One mixed pair (with Herring Gull) also present but did not nest.
- 2000 Two pairs bred, one of which successfully fledged one young. A third pair was also present but did not nest.
- 2001 Two pairs bred each fledging one young.
One pair also bred at Sandbanks with the first attempt seeing eggs lost presumed predated, second attempt chick disappeared after one week.
- 2002 One pair bred but failed at egg stage.
One pair also bred at Sandbanks but nest was predated by Magpie.
- 2003 One pair bred but failed at egg stage.
One pair also present at Sandbanks but success unknown.
- 2004 One pair bred but again failed at egg stage.
- 2005 One pair nested but failed to produce any young for fourth year running.

2006	One pair bred with two young hatching, but were soon lost presumed predated.
2007	One pair bred with two young fledging, the first successful attempt since 2001.
2008	One pair bred, but of the two young hatched just one fledged.
2009	One pair hatching one young, but unclear if fledged or not.
2010	One pair bred hatching two chicks, with one fledging successfully.
2011	One pair bred hatching two chicks, with one fledging successfully.
2012	One pair bred but no young fledged.
2013	One pair bred fledging one young.
2014	One pair bred fledging one young.
2015	One pair bred fledging two young.
2016	One pair bred fledging one young.
2017	One pair present in early spring, but one of those individuals disappeared and there was no breeding attempt for the first year since 1995.
2018	Just one unpaired individual present in spring.

Year	Confirmed pairs	Total pairs	Young fledged
1995	1	2	0
1996	1	1	0
1997	2	2	2
1998	2	2	3
1999	1	1	2
2000	2	3	1
2001	3	3	2
2002	2	2	0
2003	1	2	0
2004	1	1	0
2005	1	1	0
2006	1	1	0
2007	1	1	2
2008	1	1	1
2009	1	1	0
2010	1	1	1
2011	1	1	1
2012	1	1	0
2013	1	1	1
2014	1	1	1
2015	1	1	2
2016	1	1	1

Breeding evidence follows RBBP terminology www.rbbp.org.uk. Confirmed breeding pairs = those that have progressed to the stage where eggs have been laid even if the nests fail or young do not fledge. Total pairs = max. no. of pairs (possible, probable and confirmed). Young fledged = min. no. of young fledged.

Elsewhere in the UK, Yellow-legged Gulls have occasionally formed mixed pairs within colonies of other large gulls, with regular breeding events in Southampton, Hampshire since 2007. A pair of apparent Yellow-legged Gulls at this site since 2014 were considered to be a pure pair until it was noted that the young showed characters of hybridisation and it is assumed that one of the adults has hybrid ancestry (RBBP). The Poole Harbour pairs remain the only confirmed 'pure' pairs to have nested in the UK to date.

Identification

A plethora of information about the identification of Yellow-legged Gull is available both online (e.g. www.gull-research.org) and in reference books (such as Olsen & Larsson 2004, Olsen 2018, and the forthcoming Adriaens *et al* 2021), whilst the original papers we used back in the 1990s (Garner 1997 and Jonsson 1998) remain classics and are certainly well worth reading. It's not possible to repeat all the criteria of phenotypes and ages here (please read the above

references), however it is perhaps useful to note a few helpful pointers for juveniles in July and August, this being the most numerous age type to currently occur here, and also one of the most frequently mis-identified. It's not unusual to find blogposts and social media (including in Dorset!) with photographs labelled as Yellow-legged Gull, when in fact they show other species.

When identifying gulls always remember that there is a great deal of individual variation, especially within the larger species, so identification should always be made using a combination of features, and with the knowledge that there will always be some that are best left unidentified. For typical juvenile Yellow-legged Gull note especially the tail pattern, extent of the primary window and signs of any of moult.

For juvenile (1cy) Yellow-legged Gulls in summer at rest:

- Generally larger, bulkier and more athletic-looking, than both Herring and Lesser Black-backed often approaching Greater Black-backed in size (especially males), with a compact body and protruding chest.
- Square-headed with often pronounced dark facial mask on otherwise whitish head.
- Large, heavy looking, blunt ended bill.
- Long winged often giving 'stretched' appearance at rear.
- Warm, sometimes rusty-brown upperpart tone compared to greyish-brown Herring and Lesser Black-backed Gull.
- Mostly white belly and vent.
- Scapulars, mantle and coverts with simple fringing.
- Some newly replaced second-generation scapulars with dark anchor-shaped markings.
- Greater coverts with half-dark/half-light pattern – the outermost become gradually darker and usually lack obvious patterning.
- Tertials variable but usually with all-dark centre and narrow pale edging with few or no notches – the white restricted to tips of outer third.



1cy Yellow-legged Gull - West Bexington - 28th July 2021 - Mike Morse

In flight:

- Dark primaries with limited ill-defined 'window' (confined to inner webs of inner primaries) – less obvious than on HG, but more so than in LBBG.
- Upperwing coverts contrast strongly with dark secondaries.
- Greater covert bar progressively darker towards carpal joint.
- Narrow clear cut wedge-shaped black tail band contrasting with mostly whitish tail. Note this is broadest at the centre of the tail, obviously different from the evenly broad tail band of Herring and Lesser Black-backed.



1cy Yellow-legged Gull - Radipole Lake RSPB - 25th September 2012 - Ian Stanley

Yellow-legged Gulls look older than our locally bred gulls, having hatched three to four weeks earlier in the year than their northern counterparts. Many will arrive here in early July having already replaced a few scapulars with second-generation feathers and will likely already show some degree of wear, contrasting with the fresh pristine-looking local Herring and Lesser Black-backed that can still be growing their primaries and learning to fly!

Advanced scapular moult is a good feature that can help juveniles stand out in July and August, but note by September Herring and Lesser Black-backed Gulls will also have begun to moult so it becomes less useful. At this time Yellow-legged Gull begin their covert moult – so any second-generation coverts are also a very useful indicator. Herring Gull for instance do not usually moult their greater coverts until the Spring. It should be remembered however that all birds vary the rate at which they moult and it should not be used as an identifying feature alone. Some late moulting Yellow-legged can be found occasionally, although these are very much in the minority.

Finding Yellow-legged Gulls in Dorset

Yellow-legged Gulls can be found amongst any flock of large white-headed gulls at almost any time of the year. Patience is required though, and if methodically working through gull flocks is not your preferred way to spend birding time, then the best chance of locating one is probably a juvenile at any coastal location in July.

The earlier fledging date and advanced moult cycle mentioned above can give a huge advantage for locating juveniles during a brief period, when the local Herring Gulls and Lesser-Black backed Gulls

are mostly still in or have just left the nest. Any coastal site can hold birds, but typical locations for prolonged, close observations in recent years have included the Bill Common at Portland Bill (or in nearby fields), Chesil Cove, Ferrybridge, Radipole Lake car park (or the roof of the nearby Gurkha restaurant), Lodmoor, Abbotsbury Swannery, Cogden Beach and West Bexington beach. In Christchurch Harbour birds are regularly noted at Stanpit and Mudeford Quay.

To see a Yellow-legged Gull 'with yellow legs', Poole Harbour still provides probably the best opportunity, with the 'Stilt pools' at Swineham attracting up to 4 in Sep 2020 and 3 in Aug 2021. Holes Bay, Lytchett Fields and Middlebere host the occasional birds too, with as many as 29 at the latter site on 9th Aug 2017, although there were no reports in 2020. Venturing inland in search of pig farms may also prove to be worthwhile as these sites may continue to attract small numbers each year – 17 were near Tarrant Rushton in August 2018.



1cy Yellow-legged Gull - Radipole Lake RSPB - 25th September 2012 - Ian Stanley

References & further reading

- Adriaens P *et al.* (2021) Gulls of Europe, North Africa and the Middle East.
Birdlife International (2021) Species factsheet: *Larus michahellis*
Bellout S *et al.* (2012) Changes in the population size of Yellow-legged Gull *L m* in west-central Morocco. *Marine Ornithology* 49: 101-107
Collinson M *et al* (2008). Species boundaries in the Herring and Lesser Black-backed Gull complex. *British Birds* 101: 340-363.
del Hoyo J *et al.* (1996) Handbook of the Birds of the World.
Garner M *et al.* (1997) Identification of Yellow-legged Gulls in Britain. *British Birds* 90: 25-62 and 90: 369-383.
Green G (2004) The Birds of Dorset.
Hopper N (2008) Gulls of Poole Harbour.
Jonsson L (1998) Yellow-legged Gulls and yellow-legged Herring Gulls in the Baltic. *Alula* 4: 74-100.
Malling Olsen K & Larsson H (2004) Gulls of Europe, Asia and North America.
Malling Olsen K (2018) Gulls of the World: a photographic guide.