

Sand Martin

Riparia riparia

Category A

Passage migrant, formerly a breeding summer visitor.

World/British distribution (Snow & Perrins 1998):

A widespread summer visitor across most of Europe, Asia and North America, where suitable habitat is present, with European birds wintering in the African Sahel zone and in East Africa.

Kent status (KOS 2021):

It is a common passage migrant and local summer visitor to Kent, however the latest county report laments that the decline in breeding numbers continues.



Sand Martin at Nickolls Quarry (Brian Harper)

The Sand Martin was included in Knight and Tolputt's "List of birds observed in Folkestone and its immediate neighbourhood" (1871). This list covered an area of six miles radius from Folkestone town hall, therefore extending further inland than the current Folkestone and Hythe area, so this does not provide conclusive evidence of its occurrence here. However Henry Ulyett (1880) in one of his "Rambles round Folkestone" recalled how he met with it locally in the nineteenth century: when making his way from Folkestone towards Sugarloaf Hill, he left the rapidly growing hamlet of Foord and reached the Pent Stream (where it crosses the southern end of what is now Park Farm Road), where "on the left here is the only spot in the neighbourhood where the Sand Martins used to build, perhaps I ought to say attempted to build, for I question whether they were ever allowed to succeed, so strong is the juvenile desire for ornithological research. But here again the pickaxe and shovel are at work, rapidly removing temptation out of the way of the birds".

Ticehurst (1909) considered it to be "rather less numerous and much more locally distributed in summer" than the other hirundines "on account of the nature of its nesting requirements". He noted that it was chiefly found "along the sides of the chalk Downs ... [where] they find suitable places in the greensand district to the south and in the loose sand and gravel overlying the chalk exposed in railway cuttings and chalk-pits".



Sand Martin at Nickolls Quarry (Brian Harper)

Harrison (1953) found it to be “quite abundant” as a summer visitor to Kent and Taylor *et al.* (1981) considered it to be common, breeding where suitable sites exist, but noted that the European population had declined markedly in the years between 1969 and 1973, which was attributed to drought in the Sahel region of western Africa, and had not yet, at the time of writing, recovered to previous levels.

Breeding atlas distribution

It was formerly fairly widespread across the local area, as demonstrated by figure 1 (reproduced from Henderson & Hodge 1998).

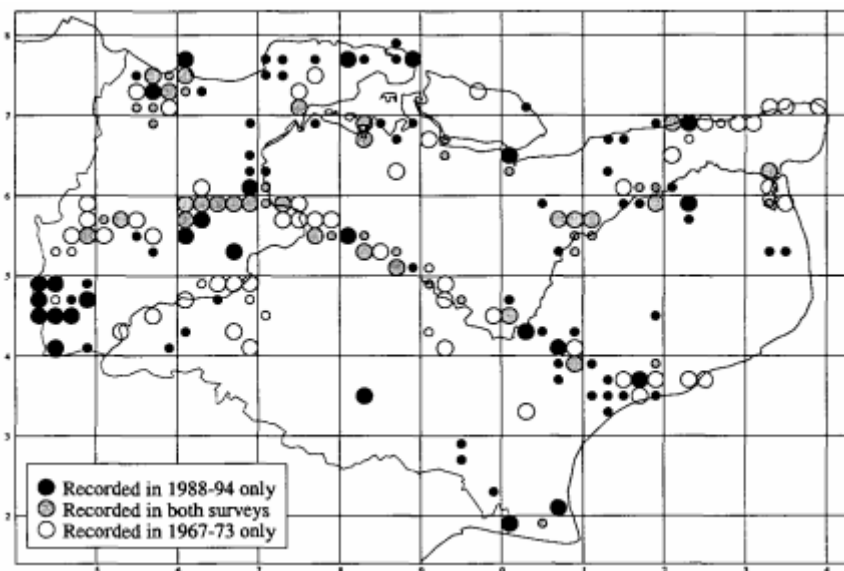


Figure 1: Breeding distribution of Sand Martin in Kent in the 1998-94 BTO/KOS Atlas

As Taylor *et al.* noted the breeding distribution clearly followed the greensand layer stretching across the county from Westerham to Folkestone, with colonies primarily restricted to sand and gravel pits, where suitable vertical banks are exploited. A few other important sites in the Stour Valley, along the Thanet coast, and in the Dartford, Sandwich and Tonbridge areas were also described.

Henderson & Hodge wrote that “while this species took advantage of the increase in available nest sites created by the post-war thirst for building materials, at that many such sites were infilled once their economic value was depleted. By the time of the second Atlas contraction of the colonies along the greensand ridge had already begun, as it had in the north of the county”.

This decline has since continued and breeding was not recorded in any tetrads in the latest atlas. The table below shows how this compares to previous atlases (Taylor *et al.* 1981; Henderson & Hodge 1998). The confirmed and probable breeding categories have been combined to account for differing definitions of these in the first atlas.

Breeding atlases	1967 - 1973		1988 - 1994		2007 - 2013	
Possible	1	(3%)	8	(26%)	0	(0%)
Probable/Confirmed	5	(16%)	1	(3%)	0	(0%)
Total	6	(19%)	9	(29%)	0	(0%)
Change			+3	(+50%)	-9	(-100%)

The table below shows the changes in tetrad occupancy across the three atlas periods.

Trends	First to second atlas (1967-73 to 1988-94)	Second to third atlas (1988-94 to 2007-13)	First to third atlas (1967-73 to 2007-13)
Local	+50%	-100%	-100%
Kent	+21%	-79%	-74%

During the first atlas breeding was confirmed in TR13 N, TR13 S, TR13 Y, TR23 I and TR13 N, with possible breeding in TR13 Z. In the second atlas period breeding was only confirmed in TR13 T, with possible breeding in eight other tetrads (all within TR13), although a pair bred at Copt Point (TR13 N) in 1990, utilising the coastal outcrop of greensand, but this record was not included within the second atlas.

Whilst the second atlas may appear to have shown an apparent increase in distribution it is significant that the instances of confirmed breeding fell by 60%, with the possible breeding records perhaps relating in many cases to wandering or migrant birds.

The last breeding record from the greensand ridge locally was at the disused Newington sand quarry in 1998, where up to 20 birds were present in June, utilising the greensand cliff on the western face of the quarry, but there have been no more recent records here.

Away from the greensand, Roger Norman noted it with some frequency at Nickolls Quarry in the 1950s and recalled how “several records fell between late spring migrants and the first autumn ones, i.e. from the first week of June to the first week of July which suggests in hindsight that a few pairs may have bred (the works area was never ‘explored’ in those years)”. He also mentioned an unusually high mid-summer count of around 100 on the 6th June 1960 which “could not be explained in that way” (Norman 2007).

Returning to the site in the late 1980s, Roger noted one on the 20th June 1987 which “added further weight to the suggestion” of local breeding.

In 2000 breeding was suspected when at least two and up to 20 were present throughout June but no nests were found, then in July 2001 four nest holes were discovered in an area of the works that had not previously been checked, one of which was being used. Two pairs then bred in 2003, but there have no further instances of nesting since. At this site it was, as Taylor *et al.* described, an opportunist breeder, nesting in temporary “cliffs” formed from piles of sand.



Sand Martin and Swallows at Nickolls Quarry (Brian Harper)

Elsewhere, Neil Frampton noted that “one or two were frequently seen throughout the summer months feeding over the Royal Military Canal west of Hythe between 1980 and 1984, but a breeding colony was never found”. It is possible that these may have originated from Nickolls Quarry or perhaps an undiscovered colony at one of the greensand cliffs on Hythe Roughs.

Clements *et al.* (2015) reported on a decrease in occupied tetrads in Kent of 79% between the second and third atlas periods, with breeding being confirmed in just 13 tetrads in the county.

At a national level Balmer *et al.* (2013) described a reduction in occupied tetrads of just 12% since the first UK atlas, with many losses in southern and eastern England being off-set by gains in northern England, Scotland and Ireland.

The national atlas data revealed that this pattern of regional change in abundance was shared by the House Martin and Swallow, as well as some other long-distance migrants. The causes of these regional differences are unclear. Ockendon *et al.* (2012) stated that given that this regional pattern is shared by several long-distance migrants with differing breeding ecology, it seems likely that factors acting on migration or in the wintering grounds are important. Climatic changes could also be a contributing factor.

Overall distribution

Figure 2 shows the distribution of all records of Sand Martin by tetrad, with records in 27 tetrads (87%).

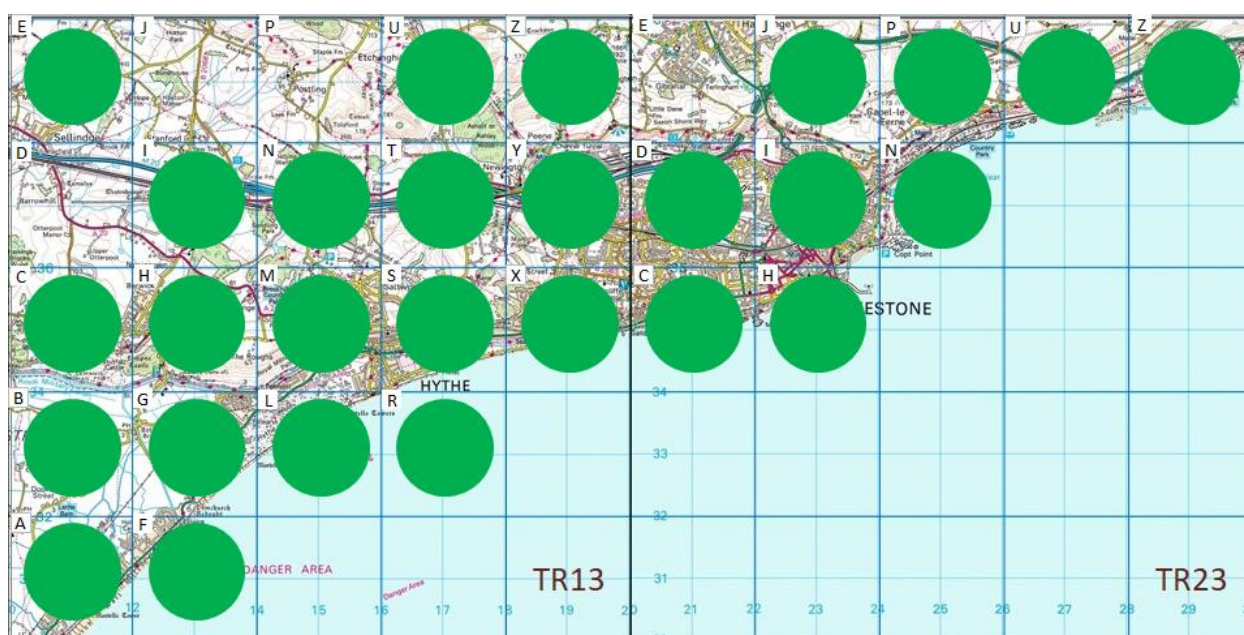


Figure 2: Distribution of all Sand Martin records at Folkestone and Hythe by tetrad

It is widespread on passage, with records only lacking from some of the less well-watched inland tetrads. It can be scarce in spring and first arrival dates vary considerably between years. The earliest ever record involved seven seen by Roger Norman at Nickolls Quarry on the 5th March 1995, with the next earliest being two seen by Sean McMinn flying north over Hythe on the 10th March 2019.

The 17th March has produced records in two years: singles at Hythe Ranges in 1993 and at the Willop Basin in 2018 and the 19th March in three years: two at Abbotscliffe in 1992, one at Nickolls Quarry in 1993 and eight there in 1995. In 2000 three arrived in off the sea at Capel-le-Ferne on the 22nd and records in the last week of March have been more frequent, although the first sighting is often not until well into April, with the mean arrival date over the last decade being the 30th March.

When there are records in March numbers can be substantial. The earliest double-figure count involved ten at Nickolls Quarry on the 26th March 1996, whilst there were 21 at West Hythe on the 27th March 1983 and 30 along the canal at Hythe on the 27th March 1996. Arrivals continue through April and well into May, with the following counts exceeding 20:

- 70 at Nickolls Quarry on the 26th April 1952
- c.100 at Nickolls Quarry on the 10th May 1952
- c.30 at Nickolls Quarry on the 22nd April 1958
- c.40 at Nickolls Quarry on the 11th May 1988
- 60 at Nickolls Quarry on the 6th May 1989
- A flock of 36 in off the sea at Copt Point on the 5th April 2000
- 40 at Nickolls Quarry on the 1st April 2019, with 33 to the 5th April

Non-breeding birds can occur again from late June and large numbers may appear in July but are thought to relate to juveniles dispersing from breeding colonies, rather than true migration, which Taylor *et al* stated is supported by ringing results. Roger Norman recounted how “exceptionally early and amazing numbers of 2,000 to 3,000 occurred at Nickolls Quarry in the evening on the 22nd July 1966”, whilst 900 were seen there in the evening of the 31st July 1973 and 1,000+ were present there over the pit and adjacent fields in the evening of the 16th July 2000. In more recent years “in excess of 225” were seen at Nickolls Quarry on the 13th July 2014 and 170 flew out to sea from Hythe on the 14th July 2017.

The main passage occurs in August and September. There was a notable and protracted westerly passage along the cliffs between the 17th August and 21st September 1992, with a total of at least 1,825 being logged by Dale Gibson and Ian Roberts, including a peak of 300 on the 11th September, whilst 400 were also seen at Nickolls Quarry on the 7th September. The following year saw a spectacular movement at Nickolls Quarry, when on the 30th August 1993 “birds passed at a rate of between 3,000 and 5,000 per hour for the two hours that the observer was present”. Further counts in excess of 200 have comprised:

940 west at Folkestone on the 3rd September 1994
610 west at Folkestone on the 10th September 1995
250 west at Folkestone on the 15th September 1995
800 east at Folkestone on the 12th September 1996
500 east at Folkestone on the 15th September 1996
250 at Nickolls Quarry on the 15th September 1996
450 west at Abbotscliffe on the 5th September 2000
1,000 west at Abbotscliffe on the 10th September 2000
250 at Nickolls Quarry on the 16th September 2001
840 at Nickolls Quarry on the 23rd August 2006

The mean departure date over the last decade has been the 7th October but stragglers often linger until mid-month, or even the third week of October. There have only been two records in the last week of the month: singles at Samphire Hoe on the 24th October 2012 and at Nickolls Quarry on the 29th October 2003, but there have been eight sightings in November, with three on the 4th (singles at Hythe in 1963, West Hythe in 1981 and at Abbotscliffe in 2020) and later records only in 2022, when there were singles at Nickolls Quarry on the 7th, 11th, 12th, 16th and 17th November (it is difficult to be certain how many individuals these records comprised, but the observers involved considered that there were at least three as there was almost daily coverage of this site during this period. Unusually mild conditions were prevalent at the time).

References

- Balmer, D., Gillings, S., Caffrey, B., Swann, B., Downie, I & Fuller, R. 2013. *Bird Atlas 2007-11: The Breeding and Wintering Birds of Britain and Ireland*. British Trust for Ornithology.
- Clements, R., Orchard, M., McCanch, N. & Wood, S. 2015. *Kent Breeding Bird Atlas 2008-13*. Kent Ornithological Society.
- Harrison, J. M. 1953. *The Birds of Kent*. Witherby, London.
- Henderson, A. & Hodge, T. 1998. The Kent Breeding Bird Atlas 1988-94. *Kent Bird Report 1996*: 134-272.
- Kent Ornithological Society (KOS). 1953-2021. *Kent Bird Reports*. Kent Ornithological Society.
- Knight, V. & Tolputt, F. 1871. List of birds observed in Folkestone and its immediate neighbourhood. *Fourth Annual Report of the Folkestone Natural History Society*. Available at: www.biodiversitylibrary.org/item/46103
- Norman, R. K. 2007. The Birds of Palmarsh Gravel Pit. <https://folkestonebirds.com/where-to-watch> (see "Further Information" section).

Ockendon, N., Hewson, C. M., Johnston, A. & Atkinson, P. W. 2012. Declines in British-breeding populations of Afro-Palearctic migrant birds are linked to bioclimatic wintering zone in Africa, possibly via constraints on arrival time advancement. *Bird Study* 59: 111-125.

Snow, D. & Perrins, C.M. 1998. *The Birds of the Western Palearctic*. Oxford University Press.

Taylor, D., Davenport, D. & Flegg, J. 1981. *Birds of Kent*. Kent Ornithological Society.

Ticehurst, N. F. 1909. *A History of the Birds of Kent*. Witherby, London.

Ulyett, H. 1880. *Rambles of a Naturalist Round Folkestone*. J. English, Folkestone.



Sand Martin at Nickolls Quarry (Brian Harper)

Acknowledgements

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