

## Mediterranean Gulls of Rye Bay

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### Introduction

Rye Bay in Sussex is one of three main breeding sites in the United Kingdom for the recent colonisation by the Mediterranean Gull. At Rye Bay in 2010 there were at least 176 nests, 17% of the nationally estimated 1016 nests at 34 sites. The other two main sites are in the neighbouring counties of Hampshire (400 nests in 2010) and Kent (225 nests in 2010), so these three sites held 79% of the national total (Holling 2012).

### Location

Rye Bay is a large area of low lying land and shallow sea between the headlands of Fairlight and Dungeness, 22 km apart. The bay straddles the Kent/East Sussex border and along its coast there are several discrete sites that offer nesting opportunities for terns and gulls. All of the nesting sites are contained within the 9137 ha of the Dungeness, Romney Marsh and Rye Bay SSSI and includes Dungeness RSPB, Rye Harbour Nature Reserve and Pett Level (which are all within the Dungeness to Pett Level SPA). Rye Bay has a long history of breeding terns and gulls (Yates 2010). Inland there is an extensive network of sheep grazing marsh with ditches and gravel pits that provide the majority of foraging options for Mediterranean Gulls.

### History of Mediterranean Gulls in Sussex

In des Forges and Harber (1963) this species is referred to as the Mediterranean Black-headed Gull and its status was “Occasional, non-breeding, summer visitor. Passage migrant. Occasional winter visitor.” Also “...between 1955 and 1961 from one to at least seven were recorded annually, numbers tending to increase each year and some birds apparently staying for months in the same locality.” In Shrub (1979) the species status had become “Scarce winter visitor and passage migrant, which has increased steadily since 1950.” There is a table that summarises all the records from 1948 to 1976 but the grand total for that period is only 179 birds.

By the 1980s the colonisation of Britain had started and James (1996) summarised it “During the past few decades the world population ... has increased dramatically ... Most marked in regions bordering the Black Sea... into the eastern Mediterranean and northwest Europe. The first breeding record in Britain was in 1968, when a pair nested in ...Hampshire. It was another eight years before the species nested successfully again, but since 1979 breeding has been annual, with a maximum of 11 confirmed pairs in 1990...” Then for Sussex “between 1982 and 1986 pairs were recorded either at Rye Harbour or Stakes Island in Chichester Harbour. In 1987 two pairs were present at Rye Harbour with one pair incubating to late April... In the first decade of colonisation of the county no young Mediterranean Gulls have fledged in Sussex.” Since then there has been a rapid colonisation of Britain and Sussex, where the main centre is Rye Bay.

The first nesting in the Rye Bay area, in 1977, was in Kent, at Dungeness RSPB. Until 1997 up to six pairs nested there annually. The first incubating pairs in the Sussex part of Rye Bay were at Rye Harbour in 1987. For breeding numbers and productivity see Figures 1, 2 and 3.

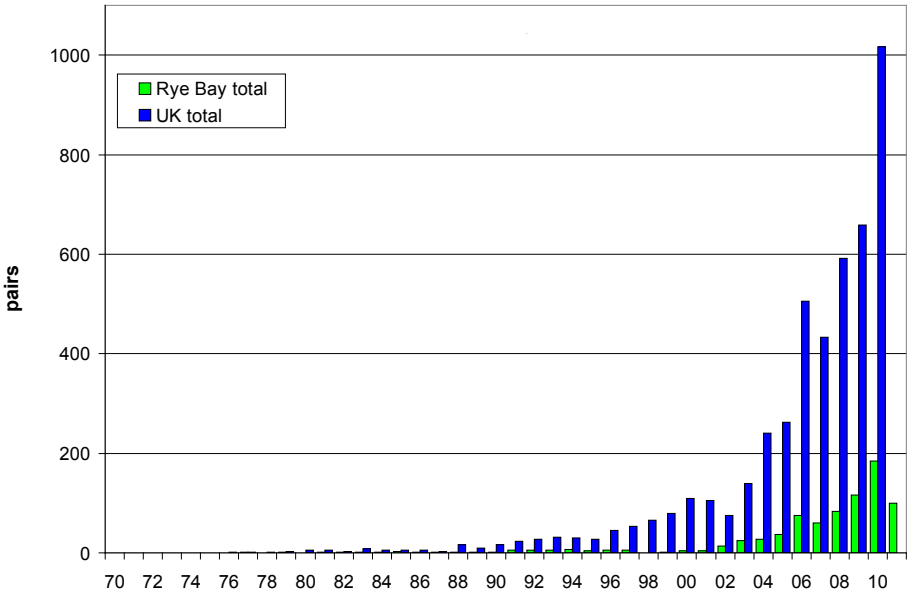


Figure 1. Mediterranean Gull breeding numbers in Rye Bay and the UK (Holling, 2012).

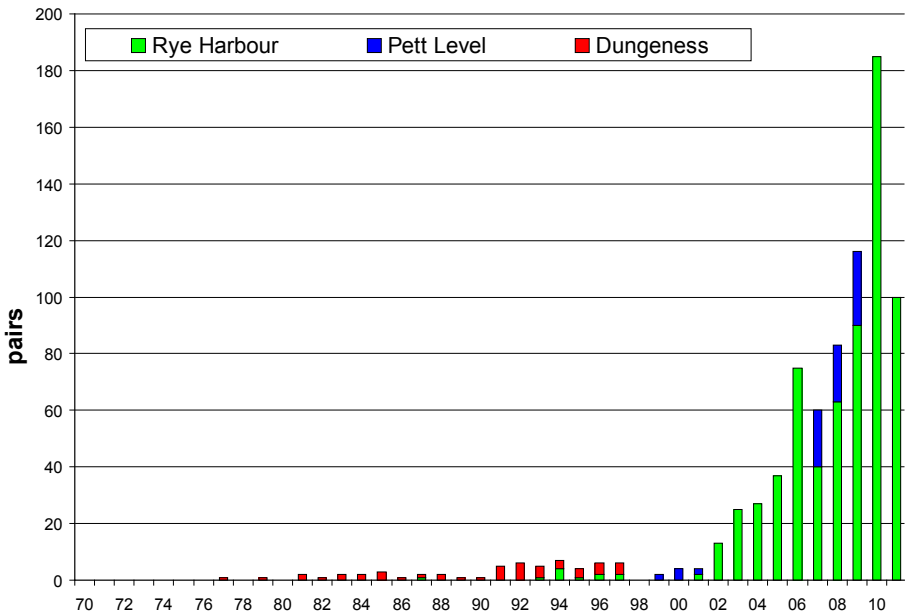
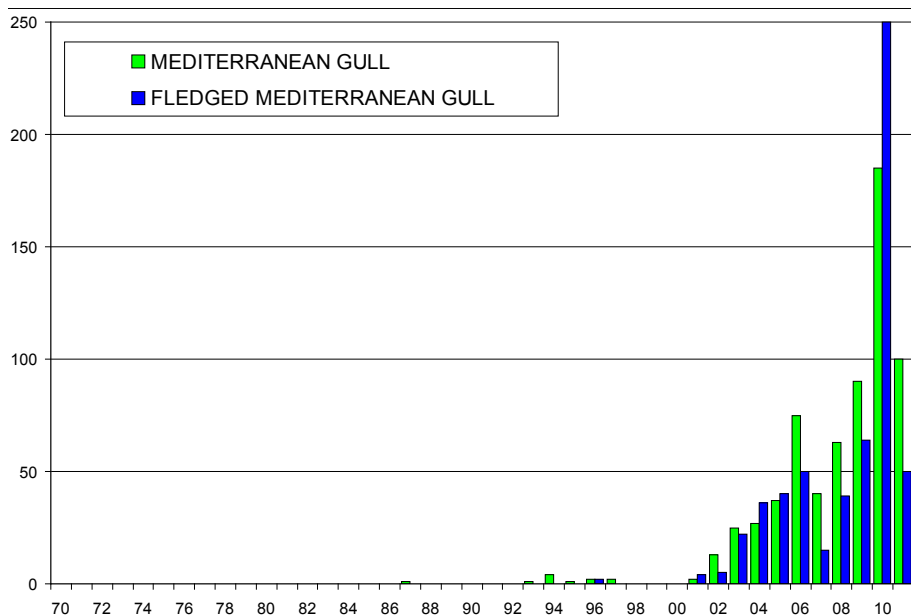


Figure 2. Mediterranean Gull Breeding Numbers in Rye Bay.



**Figure 3.** Mediterranean Gull breeding numbers and fledging success at Rye Harbour.

At Stakes Island in Chichester Harbour, 1-2 pairs nested in some years between 1988 and 1992, but raised no young and they nested again in 2010 and 2011 and did manage to fledge 2-3 young each year (Barry Collins and Ed Rowsell *pers. comm.*). In recent years at Ivy Lake, Chichester GP there were several pairs prospecting on rafts used by Black-headed Gulls, but the latter have now ceased to nest (Barrie Watson *pers. comm.*). Pairs are also prospecting among the Black-headed Gulls at Arundel Wetland Centre (Paul Stevens *pers. comm.*).

### Other "local" breeding colonies

In addition to the breeding sites in the neighbouring counties of Kent and Hampshire there have been significant numbers nesting along the neighbouring coast of France. In the Baie de Somme pairs were noted from 1988, but successful breeding was rare (Patrick Triplet *pers. comm.*). In the two closest French Departments the following populations (pairs) were recorded (Cadiou 2011):

	2001	2009	2010
Pas-de-Calais	53	320	603
Somme	0	792	2

### Seasonal occurrence in Rye Bay

In Rye Bay Mediterranean Gulls can be seen in all months, but regular sightings start in early February. Numbers increase rapidly to a pre-breeding season peak in early April, with smaller numbers remaining to nest. See Figure 4 for detail of the 2011 counts at Rye Harbour. Note that on the 11 April 2011 the maximum count of the year was 404, but there were another 40 counted at the same time (9 a.m.) at Pett Level and no doubt there were others elsewhere. As soon as the breeding season is over the birds depart, so by late July most have left and few are seen

until the following February. This pattern is in contrast to the west of Sussex, especially in and around Pagham Hbr where in 2010 large numbers were noted in January, February and August to September (SxBR 2011).

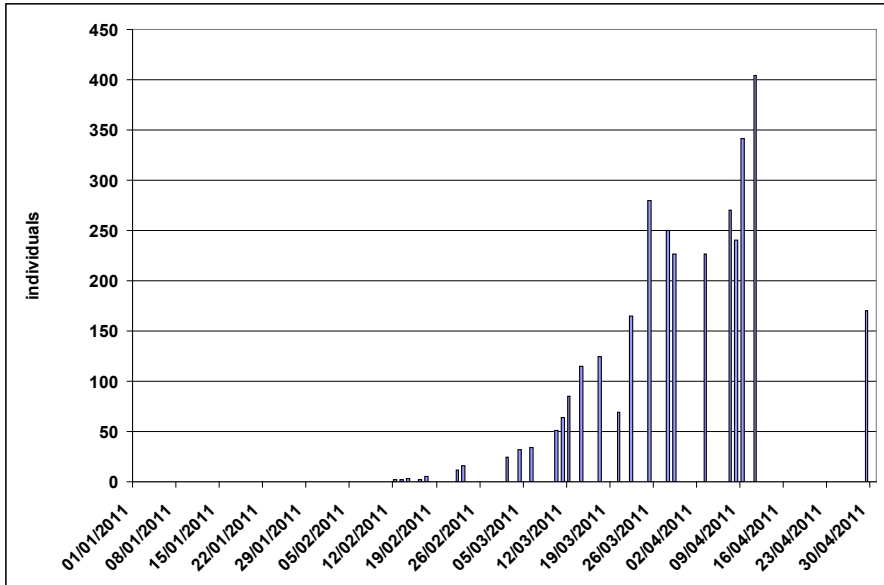


Figure 4. Mediterranean Gull peak counts at Rye Harbour NR during January to April 2011.

### Colour-ringed birds

A large number of individuals have been ringed as chicks with individually numbered colour rings that can be read with a telescope. We have knowledge of 258 individuals and at the very least this tells us where they were ringed as chicks. Some individuals have very many sightings that create a long and detailed life history. Many of these show a wandering lifestyle.

### Countries of origin

Belgium	106	UK	6
France	94	Poland	5
Netherlands	20	Italy	1
Germany	18	Serbia	1
Hungary	7	Ukraine	1

Although many of these colour-ringed birds have been seen prospecting on nesting islands in Rye Bay and involved in courtship very few have been confirmed as breeding in Rye Bay.

Birds seen in Rye Bay in May or June were considered likely to be breeding and include birds ringed as chicks in Belgium (14), France (9), Netherlands (4), Germany (2) and Hungary (1). The authors cannot think of many British breeding birds that will nest so far from their birthplace, perhaps Swallow and Quail.

### Where do they spend their time throughout the year?

A typical example of the wandering nature of this species is shown by one marked as “3N92 White”, ringed as a chick at Antwerpen, Belgium (June 2004), then seen in Lancashire (March 2005), Merseyside (June 2005), Calais, France (April 2006), Zeeland, Netherlands (April 2008), Lancashire (February 2009), Norfolk (April 2009), Merseyside (January 2010), Suffolk (March 2010), Lancashire (February 2011), Hampshire (March and April 2011), North Wales (January 2012) and Rye Bay (March 2012).

Other birds are more conservative, such as “35HO White”, also ringed as a chick at Antwerpen, Belgium (May 2007), then seen at Pas-de-Calais, France (July to October 2007, February, July, August, September 2008), Rye Bay (March, April 2009), Pas-de-Calais, France (July to October 2009, 12 February 2010), Rye Bay (26 February 2010), Pas-de-Calais, France (July, August 2010, February 2011), Rye Bay (March 2011), Pas-de-Calais, France (July 2011) and Rye Bay (February and March 2012).

### Onward migration

A small proportion of birds have been reported at breeding colonies within weeks of being seen in Rye Bay:

AJCY Green: 7 Apr 2012 Rye Bay, 16 Apr 2012 Schakerloopolder, Tholen, Netherlands.

R34K Green: 13 Apr 2012 Rye Bay, 22 Apr 2012 Goudswaard, Zuid Holland, Netherlands.

R54C Green: 26 Apr 2012 Rye Bay, 4 May 2012 Montreuil-sur-Loir, Maine-et-Loire, France.

3L22 White: 15 March 2012 Rye Bay, 23 March 2012 Antwerpen, Belgium.

### Where are they wintering?

The majority have wintered to the west of Rye Bay. Regular sites holding winter birds (and people reading and reporting the rings) include Cork and Dublin in Eire, the Camel Estuary in Cornwall, St Helens Millpond on the Isle of Wight, Radipole Lake in Dorset and Badminton GP in Hampshire. However, other regular sites include Lowestoft to the north, and Folkestone and Le Portel, Outreau and Oye-Plage (all in Pas de Calais, France) to the east.

A small number were birds heading north before presumably turning eastwards with birds from SW France and Spain.

674 Green: wintered 2009, 2010 and 2011 in Coruna, Spain, seen at Rye Bay in April 2012

R33E Green: wintered 2011 Alentejo, Portugal and seen at Rye Bay 12 April 2012.

R57A Green: wintered 2011 Western Sahara, Morocco and seen Rye Bay April 2012. This bird is the furthest sighting south of any bird known to have visited the Rye Bay area.

### Rye Bay chicks

Of six birds colour ringed in Rye Bay three are known to have fledged there and then been seen again. The following two are the most interesting:

75P: ringed Rye Bay (5 Jun 2000). Later seen Ericeira, Portugal (10 Dec 2000), Niedersachsen, Germany (22 Apr 2003, part of a failed breeding pair), Gelderland, Netherlands (9 Apr 2004), Tagus, Portugal (19 Feb 2006).

78P: ringed Rye Bay (26 June 2000). Seen in Rye Bay in spring of 2002, 2003, 2004, 2008 and 2010. During the last visit the ring was noted to be broken and has probably subsequently fallen off.



*Mediterranean Gulls, Rye Harbour*

### **Factors that influence the breeding of Mediterranean Gulls**

**Nest site** All nesting attempts in Rye Bay have been on islands of gravel pits or pools. These are small islands specifically created and managed for breeding seabirds and protected from disturbance by people and predators and usually with fencing. Most nesting is within 500 m of the coast, but some have nested on islands up to 1900 m inland. They are usually associated with breeding colonies of Black-headed Gulls and/or Sandwich Terns. Although Mediterranean Gulls will nest in loose colonies, they often nest away from other pairs of their species. Most breeding attempts are by full adults in at least their third calendar year, but many second year birds also nest successfully and some first years do attempt to breed, often in mixed-age pairs (*pers. obs.*).

**Predation** Island nesting seabirds reduce their chances of predation by fox, badger stoat and brown rat compared with other ground nesting species and much effort has been put into island management. Extensive electric fencing keeps most foxes and badgers away from some gravel pit margins and rat poison stations are maintained on some larger islands. Nesting Herring and Lesser Black-backed Gulls can take significant numbers of eggs and chicks of other island nesting seabirds, so the two larger species are discouraged from nesting on these islands.

**Food availability** Most Mediterranean Gull feeding in Rye Bay is away from the coast, with birds walking over the short, sheep grazed grassland catching invertebrates, especially earthworms. In dry springs the availability of this source of food may be much reduced and this may influence the number of birds nesting. When there are many aerial insects they switch to hawking and they are surprisingly manoeuvrable. When hundreds of Black-headed Gulls are following tractors ploughing in spring there will often be a few Mediterranean Gulls. They frequently prey on the eggs and chicks of Black-headed Gulls, Common Terns and Sandwich Terns. This behaviour has also been observed at Langstone Hbr, Hants (Chris Cockburn *pers. comm.*). Just after fledging the young Mediterranean Gull families are often located in and around the Black-headed Gull/Sandwich Tern colonies and nurseries. Here the adult Mediterranean Gulls ambush the other returning adults for fish and this may be a significant part of their diet when

feeding chicks. In years when terns have low success (thought to be linked to low availability of their food) there is a consequent reduction in Mediterranean Gull breeding success. In addition to these conventional sources of food a few individuals have been seen feeding on chips from visitors in Rye and bread at Greatstone, Kent (*pers. obs.*).

### Summary

Mediterranean Gulls have colonised Rye Bay because:

- There is a choice of sites that offer safe, island nesting space alongside large colonies of Black-headed Gulls and terns.
- There is a good and varied source of food, especially on the extensive sheep grazed pasture of Rye Harbour, but it also includes the young and eggs of other seabirds.
- The species has an unusual strategy by which a proportion of the population nests at a considerable distance from their natal site.

### The future

We have only touched the surface of this new Sussex breeding bird. It is an enigmatic bird that has only recently become common and widespread in Britain. It appears to have the potential for further population increase and perhaps it will have a significant impact on the nesting success of Common and Sandwich Terns. As an ideal subject for academic study the authors would welcome any student to study it and discover just what is going on in the busy and noisy and aromatic seabird nesting colonies of Rye Bay. It is surprising how few visiting birdwatchers record and report colour ring details, so whenever you get a close view of a Mediterranean Gull do check for rings and you may be rewarded with details of a long and interesting life history.

### Acknowledgements

The authors are grateful to Bob Edgar and Alan Martin for their helpful comments and suggestions on the first draft of this paper. Colour ringing has added considerably to our knowledge of this bird and the ringers, reporters and co-ordinators need special thanks.

### References

- Scientific names of avian species quoted in this paper can be sourced in the Systematic List.
- Cadiou, B. 2011. *Cinquième Recensement National Des Oiseaux Marins Nicheurs En France*. Métropolitaine Agence Des Aires Marines Protogees.
- des Forges, G. and Harber, D.D. 1963. *A Guide to the Birds of Sussex*. Oliver & Boyd, Edinburgh, Scotland.
- Holling, M. & Rare Breeding Birds Panel. 2012. Rare breeding birds in the United Kingdom in 2010. *Brit. Birds* 105:352-416.
- James, P. (ed.) 1996. *Birds of Sussex*. Sussex Ornithological Society.
- Shrubb, M. 1979. *The Birds of Sussex. Their Present Status*. Phillimore, Chichester.
- Taylor, D.W., Davenport, D.L. and Flegg, J.J.M. 1981. *The Birds of Kent. A Review of Their Status and Distribution*. Kent Ornithological Society.
- Yates, B.J. 2010. Terns of Rye Bay. *Sussex Bird Report* 63:265-273.