Wintering Gulls 1983

Title
Winter Gull Roosts 1983

Description and Summary Results
Over the course of the 20th Century there have been considerable increases in the breeding numbers of most European gulls, and they have increasingly frequented inland and especially urban areas, taking advantage of refuse tips and sewage works, roof tops, airfields and reservoirs. Their activities have led to worries about both pollution and health, and in some areas it is considered that they have reached pest status.

Large proportions of the wintering populations on the east side of Britain comprise Scandinavian and continental breeding birds, with the remainder thought to be British breeding birds, particularly in the west. Hence the increase in British wintering populations is partially dependent on the state of breeding populations elsewhere in Europe.

The change in winter distribution had been documented by BTO surveys in 1953, 1963 and 1973 and the 1983 one aimed to update these. Previous surveys only counted at inland sites in England and Wales, but this time an attempt was made to count coastal sites and sites in Scotland and Northern Ireland, which had not been surveyed before.

Coverage in England was good, and the larger roost complexes were all covered, usually by co-ordinated teams. Almost all inland sites counted in 1973 were counted again in 1983 and in some regions additional sites which had become available over the decade were also counted. There were relatively few inland sites in Wales and, as the Welsh coast was also counted this time, coverage was proportionally better than previously. However, a number of known large coastal roosts in England and Wales were not counted, eg Isles of Scilly, Southampton Water, the Essex coast, West Glamorgan and Carmarthenshire. Coverage in Scotland was patchy (largely due to the inaccessibility of sites and the lack of available manpower) and no counts were made in the north and west, apart from some coastal areas in the Western Isles. However, many of the inland sites south of about a line between Glasgow and Aberdeen were counted. Four counts (one inland and three coastal) were received from Northern Ireland.

Nearly 2.75 million gulls were counted in Britain during the 1983 survey, of which 1.4 million (52%) were inland and 1.3 million (48%) at coastal sites. Black-headed Gull *Chroicocephalus ridibundus* were 69% of the total, Common Gull *Larus canus* 17%, Herring Gull *L. argentatus* 10%, Lesser Black-backed Gull *L. fuscus* 2% and Great Black-backed Gull *L. marinus* 1.5%.

The inland total was an increase of over 280% since 1953. Some of this was probably a result of increased coverage, but there was certainly a major increase in total numbers as well. The rate of increase, however, appeared to be slowing down, with only a 30% rise 1973-1983 compared with 96% 1963-1973 and about 50% 1953-1963. The 1973-1983 increase in total numbers was largely due to a 35-40% increase in Black-headed Gulls (nearly 80% of gulls counted inland), and total numbers of Common Gulls rose by a similar percentage. In contrast, the Herring Gull showed a marked decrease (54%) compared with 1973, and only accounted for about 3.5% of gulls compared with up to 10-11% in earlier surveys. The Lesser Black-backed Gull continued to show a marked increase, showing the
highest percentage increase of any of the five common species (about 75%), and the Great Black-backed Gull decreased slightly (6%) compared to 1973. However all these total figures mask some differences between regions.

Over 1.3 million gulls were counted at coastal roosts although several known large ones were not included in this total. Black-headed Gulls were the most numerous (64%) here too, although there was a decreasing trend in dominance from south to north. Common Gulls occupied a similar proportion on the coast as inland and showed similar trends over the country. Herring Gulls were proportionally more numerous on the coast, especially in areas further north, and there were many more Great Black-backed Gulls on the coast than inland.

Inland, reservoirs were the most commonly used waterbodies followed by lowland natural and man-made lakes, and all those at higher altitudes were less frequently used. However, many other types were used including claypits, gravel pits, power station lagoons and settling ponds and also some flooded grasslands and low lying areas such as the Ouse Washes. In some areas terrestrial sites were occupied too: rubbish tips, used extensively for feeding and especially during very cold weather, were also used as roost sites; but airfields, playing fields and other areas of short grassland which are often used for daytime roosts and ‘loafing’ grounds were only rarely used as nocturnal roost sites, presumably due to accessibility to ground predators.

Methods of Data Capture
The 1983 survey followed the same methods as used in the previous ones. Observers were asked to count or estimate the total number of each gull species using a roost and to give brief details of the roost site. The counting period was 22-31 January, with a preference for the weekend of 22-23 January.

Full instructions for counting gulls were printed on the reverse of the census card issued to participants. Counts of birds flying into a roost were preferred to counts of birds already settled on the site, as the former were thought to provide a more accurate estimate of numbers.

With the larger roosts a series of observers was stationed around the site to count individual flight lines; and it was hoped that where possible there was synchronisation of counts over adjacent sites. In some cases, identification of individual species was not possible throughout the roosting period. In such circumstances observers were asked to identify birds as accurately as possible in a few sample periods to obtain the proportion of each species, and then multiply up to the total number.

All totals counted were minimum figures as there is a general tendency for observers to underestimate, especially larger flocks. Also, it was noted at several roosts that gulls continued to fly in after dark when counting was impossible.

Purpose of Data Capture
To obtain counts of all major inland gull roosts in the winter to compare to those conducted previously in 1953, 1963 and 1973. Some indications of numbers along the coast were included as well this time.
**Geographic Coverage**
All of the UK covering inland roost sites (mostly reservoirs and lakes) and some coastal areas.

**Temporal Coverage**
A single count at each roost was requested on one evening between 22 and 31 January 1983 with a stated preference for the weekend 22-23 January.

**Other Interested parties**
The survey was organised and run by the BTO with some of the funding from the "single species survey" part of the then contract from the Nature Conservancy Council to the BTO.

**Organiser(s)**
Anna Bowes with help from Peter Lack.

**Current Staff Contact**
archives@bto.org

**Publications**
The main report of the survey is:
The survey was noticed in *BTO News* numbers 121, 123 and 127.
(Note that a comprehensive review of all wintering gull surveys previous to the survey of 2003-2007 is:

**Available from NBN?**
No.

**Computer data -- location**
BTO Windows network central area

**Computer data -- outline contents**
A comma-separated text file containing all the counts, notes about the site and dates of counts.
Computer data -- description of contents
The datafile contains the following columns:
sitename; gridref; habitat1 (INLAND, COASTAL, OFFSHORE); habitat2 (GP=Gravel Pit, RES=Reservoir, LAK=Lake, EST=Estuary, FLW=Floodwater, HAR=Harbour, ISL=Island, OC=Open Coast, RIV=River, DL=Miscellaneous?, PLA=Platform (offshore), CW=Colliery Lagoon (only one!), CP=Clay Pit, SP=Sugar Factory, SW=Sewage Works); county -- most as GBXX, but also PLATF YORK; BH -- Black-headed Gull count; CM -- Common Gull; HG -- Herring Gull; LB -- Lesser Black-backed Gull; GB -- Great Black-backed Gull; others -- rare species; notes (what are the others); small gull count; large gull count; HGLB count; BHCMHGLB count; LBGB count; CMHG count; unknown gull count; alltotal (all added together); year; month; day; date; starttime; endtime.

Information held in BTO Archives
1 Archive Box containing all the data cards. All have been scanned. (Date stored in same box as 1993 survey.)

Notes on Access and Use

Other information

Notes on Survey Design

Specific Issues for Analysis