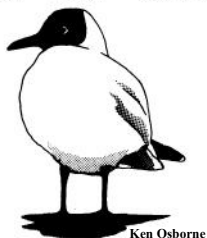


# A Study of the Movements and Site Fidelity of Foreign Ringed Black-headed Gulls in St. James's Park, 1983-86

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## INTRODUCTION

Regular monitoring of foreign ringed Black-headed Gulls *Larus ridibundus* was carried out in St. James's Park from December 1983 to May 1986. This species has been ringed and controlled in the park for some 50 years, but this has usually been done in *winter*, when many of the birds are particularly tame, and are more easily caught. However, by reading the rings with binoculars it was not only possible to check many more birds, and check them regularly, but records were obtained in spring and summer, when catching by hand is not usually possible.

It is estimated that in winter some 240,000 Black-headed Gulls occupy the roosts around London (*LBR* 48:49), dispersing daily to areas where they feed and rest. St. James's Park, where numbers usually range between 550 and 650 in mid-winter, is well known to most of the Society's members, the most important features from the gulls' viewpoint being a lake 0.7 km long, bordered by a sanctuary area of grass where the many human visitors distribute food. When the park was closed to the public in World War II this species abandoned it three days later (Bartlett 1948).

63 foreign ringed birds were identified, of which 26 made only a brief appearance, mainly at times of passage. The frequent monitoring of those that stayed made possible reasonably accurate records of the periods during which these birds used the park, and showed the extent to which individual birds returned to the same place in successive years from their breeding areas abroad.

## METHODS

The park was visited about four days per week. Regular visits were made each Saturday and Sunday, with additional visits during the week whenever possible. At times daily visits were made for a week or more to check whether those birds which had adopted the park as a feeding site used it consistently day after day. Other localities were visited to discover alternative feeding places used by the birds identified in St. James's Park. On each visit the flocks of Black-headed Gulls were examined for foreign rings, which were then read with 8 × 30 binoculars.

The birds with *British* rings were too numerous to be regularly recorded, as much ringing of this species is carried out in Central London. Records were taken, however, of those seen in spring and summer, together with a small proportion of those present in autumn and winter, and where the information obtained is relevant to the matters discussed it is duly mentioned.

The statement that when a ring was identified as foreign it was then read, is, unfortunately, a generalisation. It takes time to read a ring with certainty, and if the bird flew off before the details were clearly seen it remained

unrecorded, unless it was successfully identified on another occasion. Nor, obviously, could a ring be read if the bird was resting on the lake, or some inaccessible place. To counteract this, whenever possible two or three tours of the park were made at each visit, at different times of the day.

The degree to which the records are comprehensive varies with the group of birds under consideration. It was found that the birds could be divided into three groups (see Table 1), namely, *winterers* which were seen regularly from the time of their arrival until the end of the winter; *temporary visitors* which used the park equally regularly for a month or two, and then moved elsewhere; and *transients* which were seen for less than a week. Many transients visit the park on one day only, others just for three or four days. Consequently they are easily missed, and the birds listed under this heading represent only a small proportion of this group. The lists of winterers and temporary visitors, however, are considered to be reasonably complete, for once a bird has settled to a particular feeding place it uses it frequently, often daily, and it would have been exceptional for one to have used the park for a month or more without being regularly observed.

No differences were noted in the movements or site fidelity between second year birds and adults, and, therefore, for the purposes of this paper references to adults include birds in their second year.

## RESULTS AND DISCUSSION

### Arrival dates

Although recorded in all months of the year, the Black-headed Gulls which visit St. James's Park are predominantly winter visitors from breeding colonies in Continental countries bordering the Baltic and North Sea (Christmas *et al.* 1986), but the first arrivals appeared surprisingly early. Our visitors from the Fenno-Scandian and Baltic colonies are normally expected to arrive in Britain from late July onwards, with the main influx from mid-September to late October (Cramp & Simmons 1983), but the first arrivals for the 1984/85 winter were seen on July 1st, and on July 7th 120 were present, a sizeable number for so early a date when compared with a mid-winter peak of 600 to 650. Three of the foreign ringed birds seen the previous winter had already returned by July 11th. In 1985 the early and rapid build-up of numbers was repeated, with the first arrivals on July 4th, and 160 by July 13th (see Table 2).

St. James's Park is exceptional in as much as a high proportion of its winter numbers are to be seen in July and August, whereas at other Central London parks, which have large flocks in autumn and winter, the birds are either absent or few in number. This is probably because at St. James's the birds are freer from disturbance at this time. There is no boating on the lake, and it is almost completely bordered by the sanctuary area of grass. This is separated from the lake path by a railing about one metre high, which does not hinder people feeding the birds, but allows the gulls to preen and rest in relative safety at the edge of the lake when not seeking food. In 1984 11 (42%) of the 26 winterers and temporary visitors arrived in July or August, and in 1985 13 (50%) of the 26 recorded arrived in these two months. These high percentages are not representative of Central London as a whole, but result from early arrivals using St. James's Park in preference to other sites in the area, where the birds were few, or absent, in July, and significant numbers did not appear before August.

There was no main influx from mid-September to late October; on the contrary, this was the period when new arrivals were least frequent. After the high proportion in July and August there were few new arrivals until November. These later birds *may* have been in the London Area for some while, using a different day-time site, but there was no evidence that this was

so. The autumn migration is usually regarded as a continuous journey from breeding areas to winter quarters, with only short stops of a day or two to feed and rest. Since the breeding colonies are normally abandoned when nesting is completed, usually between the end of August and mid-September, late arrival here is therefore usually attributed to post-fledging/post-breeding dispersal before starting the journey to winter quarters. Data kindly supplied by correspondents on the Continent suggest that this dispersal is not necessarily a random movement of short duration, and that some Black-headed Gulls may regularly migrate in two stages, staying from one to five months at an intermediate location, before flying on to their final destination.

Although some birds that have bred successfully may arrive at the end of July or in August, most of those that did so will have been non-breeders or failed breeders, as those that arrived still earlier certainly were. The age analysis below indicates that those arriving in July and August were mainly non-breeders; the majority being young birds. First breeding usually takes place at two years, but about one-third are thought not to breed until three years old (Patterson 1965).

Age	Winterers and temporary visitors arriving in July and August	
	1984	1985
2 months	2	—
1 year	4	3
2 years	2	5
3 years	—	2
7 years	—	1
unknown	3 (at least 3, 6, & 15 yrs)	2 (at least 7 & 16 yrs)
	<u>11</u>	<u>13</u>

In 1984 the first juvenile (unringed) was seen on July 29th, but in 1985 two juveniles (unringed) were seen as early as July 7th, and were perhaps British bred. Although an abundant British breeding species, British bred birds are apparently not numerous in Central London. In the 1969/70 winter two ringed as nestlings in The Swale, Kent, and one ringed as a nestling at Rat Island, Essex, were controlled in Hyde Park/Kensington Gardens (Widgery 1970), and there have been a few other records since, but of 85 birds with British rings controlled during the present study none had been ringed at a British breeding colony. The earliest recorded ringed juvenile was on July 30th, 1985, from Lithuania.

Table 1. Field records of foreign ringed Black-headed Gulls at St. James's Park, London.

Ring No.	Age code	Ringing date	Place ringed	WINTERING BIRDS						
				1983/84 Last seen	1984/85 First seen	1984/85 Last seen	1985/86 First seen	1985/86 Last seen		
Helgoland 5269421	6	26.3.83	Malente-Grensmehlen, Dieksee, Schleswig-Holstein, GFR	17.3.84	10.7.84	16.3.85	—	—	—	—
Kaunas 183543	1	14.6.82	Zatysiai, Jonava, Lithuania	25.3.84	11.7.84	23.3.85	8.7.85	9.3.86	—	—
Kaunas 193292	1	11.6.82	Lake Zhuvintas, Alytus, Lithuania (also present 1982)	18.3.84	10.8.84	10.3.85	27.7.85	23.11.85	—	—
Kaunas 202195	1	9.6.83	Gargzdai, Klaipeda, Lithuania	4.2.84	29.8.84	23.12.84	10.8.85	9.3.86	—	—
Hiddensee 5082751	1	20.6.83	Anklam, Bezirk Neubrandenburg, DDR	18.3.84	23.9.84	23.3.85	12.10.85	15.3.86	—	—
Oslo MB06317	1	14.6.77	Skomakersjaera, Hvaler, Ostvold, Norway (also present 22.3.80 & winter 1982/83)	18.3.84	3.11.84	24.3.85	6.10.85	16.3.86	—	—
Matsalu U-114764	1	14.6.75	Harakarahu, Parnu, Estonia (also present 25.1.76 & 16.2.80)	3.3.84	13.11.84	22.3.85	2.11.85	25.1.86	—	—
Matsalu U-172386	1	2.7.78	Tostamaa Kivilaid, Parnu, Estonia	11.3.84	—	—	—	—	—	—
Matsalu U-197055	1	23.6.82	Piira, Rakvere, Estonia	25.2.84	—	—	—	—	—	—
Stockholm 6066476	6	12.3.75	Malmö, Sweden (also present 29.12.79)	26.2.84	27.11.84	22.3.85	17.11.85	9.3.86	—	—

Age at time of ringing given according to EURING code:—

1 = Pullus, nestling or chick not yet flying

3 = Hatched during calendar year of ringing

5 = Definitely hatched during previous calendar year

6 = Age unknown, but hatched before previous calendar year

Ring No.	Age code	Ringing date	Place ringed	WINTERING BIRDS			
				1983/84 Last seen	1984/85 First seen Last seen	1985/86 First seen Last seen	1985/86 Last seen
Kaunas 196367	1	6.6.83	Lake Zhuvintas, Alytus, Lithuania	—	28.10.84 23.3.85	19.7.85 9.3.86	—
Moscow M-196748	6	5.7.84	Leningrad, Byborg, USSR	—	18.11.84 22.3.85	—	—
Helsinki ST077334	1	4.7.84	Urjala, Hameen, Finland	—	25.11.84 31.3.85	19.10.85 16.3.86	—
Arnhem 3365402	1	20.6.84	Engbertsdijkvenen, Overijssel, Holland	—	25.11.84 3.3.85	30.11.85 18.3.86	—
Matsalu U-391079	1	18.6.83	Ilka, Parnu region, Estonia.	—	4.12.84 24.2.85	—	—
Helgoland 5193801	6	3.10.84	Toening/Eider, Schleswig-Holstein, GFR	—	29.12.84 23.3.85	—	—
Helsinki ST088317	1	18.6.84	Lohtaja, Vaasan, Finland	—	5.1.85 31.3.85	—	—
Helsinki ST030815	1	20.6.78	Hollola, Hameen, Finland (also present 3.3.79)	—	13.1.85 23.3.85	17.11.85 29.12.85	—
Helgoland 5231257	1	29.6.80	Insel Helmsand, Schleswig-Holstein, GFR (transient 2/4.3.85)	—	—	5.11.85 9.3.86	—
Helgoland 5264743	5	9.9.84	Kiel-Kleiner Kiel, Schleswig-Holstein, GFR	—	—	15.12.85 18.3.86	—
Moscow M661716	?	?	U.S.S.R.	—	—	15.12.85 9.3.86	—
Kaunas 230775	1	14.6.85	Zatysiai, Jonava, Lithuania	—	—	31.1.86 15.3.86	—

Ring No.	Age code	Ringing date	Place Ringed	TEMPORARY VISITORS			
				1983/84 Last seen	1984/85 First seen Last seen	1985/86 First seen Last seen	1985/86 Last seen
Copenhagen 6045381 + T49	6	25.3.80	Christianshavns Vold, Copenhagen then at Regent's Park, 3 km NW, on	26.9.83	7.7.84 11.11.84	17.7.85 3.11.85	—
Kaunas 208245	1	20.6.83	Lake Zhuvintas, Alytus, Lithuania	29.1.84	26.1.85	22.11.85	—
Kaunas 205845	1	18.6.84	Gargzdai, Klaipeda, Lithuania	—	21.7.84 15.9.84	15.7.85 14.9.85	—
Helsinki ST009508	1	12.7.83	Usikaarileptyy, Nykarleey, Vaasan, Finland	—	7.8.84 2.9.84	27.7.85 11.8.85	—
Kaunas 207526	1	17.6.83	Lake Zhuvintas, Alytus, Lithuania (Transient 2.6.84) (Embankment, 1 km NE, 15.2.86 & 14.3.86)	—	10.8.84 2.9.84	—	—
Kaunas 205714	1	18.6.84	Gargzdai, Klaipeda, Lithuania (transient 9.3.85)	—	25.8.84 11.11.84	7.7.85 27.11.85	—
Prague E-501908	6	15.3.71	Prague, Czechoslovakia (also present 2.1.81)	—	29.8.84 24.2.85	29.7.85 8.9.85	—
Moscow E-874287	1	21.6.78	Osvetskoy Lake, Nr. Vitebsk, Belorussia (also Embankment, 1 km NE, 13.11.85 & 6.3.86)	—	25.11.84 13.1.85	31.7.85 26.10.85	—
Helgoland 5253954	6	15.9.84	Kellerhusen, Schleswig-Holstein, GFR (also transient 11.1.86)	—	16.12.84 20.1.85	—	—
Matsalu U-197035	1	23.6.82	Piira, Rakvere, Estonia	—	3.3.85 22.3.85	—	—
Kaunas 233169	1	20.6.84	Lake Kretuonas, Svencionys, Lithuania	—	—	13.7.85 16.8.85	—
Kaunas 202143	1	8.6.83	Gargzdai, Klaipeda, Lithuania (also Hyde Park, 2 km W, 19.11.85)	—	—	29.7.85 8.9.85	—
Matsalu U-388254	1	26.6.83	Tostamaa Kivilaid (Parnu), Estonia	—	—	31.7.85 24.9.85	—

Ring No.	Age Ringing code	Ringing date	Place Ringed	TEMPORARY VISITORS		
				1983/84 Last seen	1984/85 First seen Last seen	1985/86 First seen Last seen
Gdansk FB-48934	6	27.3.80	Wiadyslawowo, Gdansk, Poland	—	—	4.9.85 11.1.86
Oslo MB07822	1	17.6.79	Karisleijør, Sandefjord, Vestfold, Norway (transient 9.3.86)	—	—	29.10.85 27.11.85
<b>Ring No.</b>	<b>Age Ringing code</b>	<b>Ringing date</b>	<b>Place Ringed</b>	<b>TRANSIENTS</b>		
Stavanger 680325	1	27.6.83	Stange, Karmøy, Rogaland, Norway	1983/84 Mar. 18	—	1985/86
Matsalu U-388549	1	26.6.83	Tostamaa Kivilaid, Parnu, Estonia	Apr. 28, 29	—	—
Kaunas 197647	1	20.6.83	Klaipeda, Lithuania	May 5, 6, 7	Mar. 24/28, 1985	—
Kaunas 207526	1	17.6.83	Lake Zhuvintas, Alytus, Lithuania (Temporary visitor 10.8.84 to 2.9.84) (Embankment, 1 km NE, 15.2.86 & 14.3.86)	June 2	—	—
Oslo MB09842	1	18.6.83	Rønnastrya, Grue, Hedmark, Norway	—	1984 July 21	—
Bruxelles 2T88028	1	25.5.84	Helechteren, Limburg, Belgium	—	Aug. 2	—
Kaunas 202383	1	18.6.82	Zatysiai, Jonava, Lithuania	—	Aug. 3	—
Matsalu U-307700	1	12.6.80	Kobaja Laimadal, Haapsalu, Estonia	—	Aug. 11	July 27, 1985

Ring No.	Age Ringing code	Ringing date	Place Ringed	TRANSIENTS		
				1983/84	1984/85	1985/86
Helgoland 5248475	3	4.12.82	Kiel-Neumeehlen, Schleswig-Holstein, GFR	—	Sept. 9	—
Moscow M207574	?	.84	U.S.S.R. (Green Park, 0.5 km NW, 22.12.85 to 8.3.86)	—	Oct. 13 Nov. 10, 11	Mar. 15, 1986
Copenhagen 6078702 + MIP6	6	17.3.84	Langebrog, Copenhagen (Embankment, 1 km NE, 23.11.85)	—	Dec. 21	—
Matsalu U-357520	1	3.7.80	Voiste, Parnu, Estonia	—	1985 Jan. 19	—
Kaunas 216338	1	18.6.84	Lake Zhuvintas, Alytus, Lithuania (Victoria Street, 0.5 km SE, 11.1.86)	—	Feb. 24	—
Moscow M628207	?	?	U.S.S.R. (Regent's Park, 3 km NW, 15.12.84)	—	Mar. 2, 3	—
Helgoland 5231257	1	29.6.80	Insel Helmsand, Schleswig-Holstein, GFR (Winterer 5.11.85 to 9.3.86)	—	Mar. 2, 3, 4	—
Kaunas 232615	1	20.6.84	Lake Kretuonas, Svencionys (Richmond-on-Thames, 13 km SW, 24.11.85)	—	Mar. 5	Dec. 16, 17, 1985
Kaunas 205714	1	18.6.84	Gargzdai, Klaipeda, Lithuania (Temporary visitor 1984/85 and 1985/86)	—	Mar. 9	—
Hiddensee 5082695	1	20.6.83	Putzarer See, Anklam, DDR	—	Mar. 22, 23	—
Arnhem 3383548	5	6.5.84	Graveland Zuid, Noord-Holland, Holland	—	Mar. 23	—
Kaunas 222560	1	18.6.84	Daugai, Alytus, Lithuania	—	—	1985 July 27/30

## TRANSIENTS

Ring No.	Age code	Ringing date	Place Ringed	1983/84	1984/85	1985/86
Kaunas 217461	1	10.6.85	Lake Zhuvintas, Alytus, Lithuania	—	—	July 30
Kaunas 229118	1	14.6.84	Zatysiai, Jonava, Lithuania	—	—	Aug. 10, 11
Kaunas 229060	1	14.6.84	Zatysiai, Jonava, Lithuania	—	—	Sept. 8, 10
Kaunas 233420	1	21.6.84	Lake Kretuonas, Svencionys, Lithuania	—	—	Sept. 21
Kaunas 151082	1	14.6.79	Zatysiai, Jonava, Lithuania (Embankment, 1 km NE, 25.1.86 & 7.2.86)	—	—	Nov. 5
Helgoland 5253954	6	15.9.84	Kellerhusen, Schleswig-Holstein, GFR (Temporary visitor 16.12.84 to 20.1.85)	—	—	1986 Jan. 11
Oslo MB08722	1	17.6.79	Karislejer, Sandefjord, Vestfold, Norway (Temporary visitor 29.10.85 to 27.11.85)	—	—	Mar. 9
Kaunas 222071	1	24.6.84	Zatysiai, Jonava, Lithuania	—	—	Mar. 15
Matsalu U-403962	?	.85	Estonia	—	—	Mar. 22
Helsinki ST064470	?	.85	Finland (Regent's Park, 3 km NW, 10.1.86)	—	—	Mar. 23
Kaunas 241324	1	13.6.85	Lake Zhuvintas, Alytus, Lithuania	—	—	Apr. 19

Arrivals continued throughout each season, but it is noticeable from Table 1 that a much smaller proportion of the birds arriving from December onwards returned the following year, no doubt because whereas the earlier arrivals were taking up their normal winter quarters, the later birds included some forced by severe weather to leave their usual locations.

**Departure**

The great majority of the birds leave en masse about a week before the end of March. One day they are there in seemingly undiminished numbers, and the next day only a fraction remain. Some birds leave earlier, some later, and many transients are present at this time, but the sudden departure of the majority remains a notable feature of the annual cycle.

Adults do not remain long after the main exodus since they depart early for their breeding areas, and during the study period no adult bird was seen later than Apr. 13th, except for a single bird in 1986 which was seen alive until Apr. 22nd, and found dead two days later.

The movement of young birds in spring is less straightforward. One-year-old birds do not necessarily complete the return migration (Cramp & Simmons 1983), so the timing of their departure is less critical. Nevertheless, it was found that the main exodus included most of the 1st winter/summer birds that had wintered in the park.

1984. The number of 1st winter/summer birds seen after the main exodus was exceptionally high (see Table 2), but judging by the widely fluctuating numbers, with a significant 'low' immediately after the exodus, those seen that spring were mainly newcomers, and at times more first year birds were present than were seen on any date during the winter. None of the 1st winter/summer birds with either a foreign or British ring, and known to have been present during the winter, was seen after Apr. 7th; the three ringed 1st winter/summer birds recorded after that date stayed only briefly, and were apparently passing through (Table 1). Numbers remained unusually high, with 250 on Apr. 29th, then gradually diminished, although the withdrawal from winter quarters was not completed until June 7th, compared with about May 21st in 1985, and May 5th in 1986. There was then a gap from June 8th to June 30th, when a maximum of six birds were present. The destination of these one-year-old birds, and why, having left it so late, they should still withdraw from their winter quarters is not clear. The Lithuanian bird seen on June 2nd reappeared on Aug. 10th, and remained until Sept. 2nd. The other Lithuanian bird, seen, apparently on passage, as a one-year-old in May 1984 was recorded again the following year, but in March, the usual time for adult passage movements.

1985. Most 1st winter/summer birds again left with the adults, but some with British rings, and known to have been in the park that winter, were seen up to Apr. 21st. The arrival of unusually large numbers of 1st winter/summer birds which occurred the previous season after the main exodus was not repeated; numbers dropped to 20 by Apr. 11th, then dwindled further, so that from May 24th to July 3rd there was again an interval when this species was virtually absent from the park, with a maximum of seven seen at any one time.

1986. None of the foreign ringed birds recorded during the winter was seen later than Mar. 18th. A few adults were seen with the first year birds until Apr. 13th, after which one of them remained until Apr. 24th, when it was found dead. The first year birds that remained after the main departure, including seven that had been ringed locally that winter, left gradually, and all had gone by May 5th. As in the two previous years, the dwindling number of winter residents was augmented from time to time by the brief appearance of flocks of newcomers, and first year birds with foreign rings were recorded on single dates up to Apr. 19th. No bird of this species was seen from May 5th to May 31st, the end of the study period.



Table 2. Counts from March to July, showing the late departure of some non-breeding birds from winter quarters, the interval when birds are virtually, or completely, absent, and the early return of many birds for the succeeding winter.

1984		1985		1986 (departure only)	
Mar. 18	400+ Adults & 1st winter/summer	Mar. 19	620 Adults & 1st winter/summer	Mar. 18	350 Adults & 1st winter/summer
Mar. 24	40 Mostly 1st winter/summer	Mar. 26	92 Adults & 1st winter/summer	Mar. 24	70 Including 10 adults
Mar. 31	60 Mostly 1st winter/summer	Mar. 31	150 Mostly 1st winter/summer	Mar. 31	30 Including 1 adult
Apr. 8	150 Mostly 1st winter/summer	Apr. 4	50 Only 1 adult	Apr. 4	105 Including 12 adults
Apr. 23	150 All 1st winter/summer	Apr. 5	75 All 1st winter/summer	Apr. 13	138 Including 5 adults
Apr. 29	250 All 1st winter/summer	Apr. 7	45 All 1st winter/summer	Apr. 22	13 Including 1 adult
May 19	60 All 1st winter/summer	Apr. 11	15/20 All 1st winter/summer	Apr. 24	6 All 1st winter/summer
May 28	20 All 1st winter/summer	to		Apr. 30	3 All 1st winter/summer
June 6	10 All 1st winter/summer	May 18		May 5/31	None
June 8 to 30	6 (maximum) No adults	May 24 to July 3	7 (maximum) No adults		
July 1	15 Adults & 1st summer	July 4	25 Adults, 1st summer,		
July 6	30 (juveniles not seen	July 7	60 and, from July 7th,		
July 7	120 until July 29th)	July 9	125 juveniles.		
		July 13	160		

### Spring and summer

At one time it was commonly supposed that a good many of the Black-headed Gulls visiting us from abroad, especially birds in their first year, remained with us in winter quarters throughout summer (Witherby 1943). Certainly St. James's Park, and similar localities where 1st winter/summer birds are present virtually throughout the year, can give this impression, but it was found that, apart from the few exceptions mentioned below, they did not actually pass the summer there. Except for one found freshly dead on Apr. 24th 1986, no adult bird was seen later than Apr. 13th, or before July 1st. One-year-old birds were always present well into the spring – in 1984 as late as the beginning of June – and birds started to return for the succeeding 'winter' from the beginning of July, but there was a distinct interval of three weeks in 1984 and six weeks in 1985 when 1st winter/summer birds were also absent, except for a maximum count of seven at any one time (see Table 2). These few exceptions to the general behaviour are thought to have been weak or sickly birds; some were noticeably lethargic and in poor condition, and one found freshly dead on June 21st 1985 had apparently wasted away, weighing 155g, well below the weight of a healthy one-year-old bird.

### Site fidelity

Table 1 shows the regularity with which birds of this species may return to the same winter quarters year after year. Of the 11 birds seen regularly in the 1983/84 winter, 9 (82%) returned the following winter, and 8 (73%) of them the winter after that as well. Of the 26 seen regularly in 1984/85, 17 (65%) returned in 1985/86.

As the above percentages have been calculated on a small number of birds they must obviously be treated with reserve, and an 82% return, for example, barely allows sufficient margin for normal mortality. Nevertheless, it is clear that the degree of site fidelity is high. Even with larger samples, the proportion of birds returning can be expected to vary markedly from winter to winter. It is reasonable to suppose that if it is a normal winter in Europe the birds will occupy their usual winter quarters, to which they will return the following year, whereas a severe winter will force some birds to unaccustomed locations, to which they are less likely to return.

Some birds used the park throughout the winter, but others used it regularly for a month or two, and then moved elsewhere, although their roost site may not have changed. As Table 1 shows, these temporary visitors tended to arrive early, and then leave again in the autumn, at which time there was a general rearrangement, with the arrival of new birds coinciding with the departure of many of the earlier arrivals.

Only one temporary visitor was recorded in the 1983/84 winter, as the study did not start until December 1983, and the single record had been specially noted earlier because of the conspicuous coded ring 'T49'. This bird, in at least three consecutive winters, used St. James's Park regularly in the early part of the season, and then left in the autumn, after which it was seen each winter in Regent's Park, 3 km to the northwest. After changing to Regent's Park it was not seen again at St. James's until the following winter, nor was it known to have visited Regent's Park while using St. James's. The behaviour of T49 shows that when a bird changes its daytime site in this way, using one regularly for a while and then changing to another, it may be as loyal to the second locality as it is to the first. Three other temporary visitors were seen at other London sites after they had stopped using St. James's, but no regular pattern as seen in T49 was established.

It was found that there is considerable variation between individual birds regarding the extent and use of their daytime sites. Many birds had one site at which they remained for most of the day, feeding, preening and resting in one small area. Other birds, while continuing to use the park throughout the

winter, did not necessarily do so all day and every day, but took advantage of attractive conditions elsewhere. Certain birds, for example, showed a preference for nearby Hyde Park if there had been heavy rain and the grass and football pitches were waterlogged. That it is very much a matter of individual habit is illustrated by two birds which regularly rested on the roof beside the Ritz Hotel. Both descended for the bread and other food distributed from time to time in the adjacent Green Park, but whereas one was seen in St. James's Park, 0.5 km away, on only three occasions, the other was to be seen at either place with equal frequency.

The above remarks refer to the *main* daytime feeding and resting sites. Since the birds fly in daily from roosts up to 25 km away, they no doubt stop at suitable feeding places en route. In summer and autumn most birds do not arrive in the park until several hours after daybreak, the delay perhaps because of the dearth of human visitors with food in the early morning, so presumably their first food of the day is obtained elsewhere. Also at this time of the year many birds depart three to five hours before dusk, in contrast to the winter, when most birds remain until dark.

#### Transients

Homes (1957), referring to the status of this species in the Society's Area, says '...perhaps also a passage migrant'. It is possible that some of the birds recorded as making only brief appearances *were* on passage. Perhaps to, or from, winter quarters in southwest England, especially as some such birds were seen at times of passage movements in successive years, and on seemingly outward and return journeys. A brief appearance, however, is not in itself evidence of a passage movement, as the bird may merely have changed briefly its daytime feeding site, while remaining at its London Area roost site. Eight of the 31 transients were in fact located in winter at other sites in Greater London.

The winter movements of the other transients remained unknown. Continental Black-headed Gulls certainly reach the southern and western counties, and some may well travel through London, but no details of ringed birds to establish this have yet been obtained. None of the transients, or temporary visitors, was controlled or recovered in southwest England, and none of the 85 British ringed birds recorded during the study was ringed outside the Society's Area. Nevertheless, it is believed that eventually appropriate linking controls are likely.

#### SUMMARY

Regular monitoring of foreign ringed Black-headed Gulls was carried out in St. James's Park between 1983 and 1986. Particular attention was paid to the presence, and absence, of birds, and where possible alternative feeding sites were traced.

The resultant data emphasise the regularity with which this species usually returns each winter to the same feeding and resting sites. However, it also shows that whilst some birds will use the same site throughout, others will use it each year for part of the season only, and then move to a second locality, to which they can be equally faithful.

It was found that winter visitors from the Continent started arriving earlier than is commonly supposed, namely, from the beginning of July onwards, and that in July and August St. James's Park is used in preference to other sites in Central London.

The one time belief that many non-breeding birds from the Continent remain in winter quarters throughout summer (Witherby 1943) was not upheld, but as some departing one-year-old birds remained as late as June, and some birds arrived for the 'winter' as early as July 1st, casual observation

could easily give the impression that this was so.

It seems likely that some of the birds recorded were passage migrants through the Society's Area, to, or from, winter quarters in southwest England, but no linking controls or recoveries of ringed birds were obtained to substantiate this.

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#### REFERENCES

- BARTLETT, T. L., 1948. St. James's Park & Green Park 1939-47. *Report of the Committee on Bird Sanctuaries in the Royal Parks*. HMSO, London.
- CHRISTMAS, S. E., CHRISTMAS, T. J., GOSLING, A. P., PARR, A. J., 1986. Feeding behaviour and geographical origins of Black-headed Gulls *Larus ridibundus* wintering in Central London. *Ringling & Migration* 7: 1-6.
- CRAMP, S. and SIMMONS, K. E. L., 1983. *Handbook of the Birds of Europe, the Middle East and North Africa*. Vol. III. Oxford.
- HOMES, R. C. (Ed.), 1957. *The Birds of the London Area since 1900*. (Revised edition 1964). London.
- PATTERSON, I. J., 1965. Timing and spacing of broods in the Black-headed Gull. *The Ibis* 107: 433-59.
- WIDGERY, J. P., 1970. Ringing controls and territorial feeding behaviour of Black-headed Gulls in Hyde Park and Kensington Gardens. *Lond. Bird Rep.* 34: 88-89.
- WITHERBY, H. F., JOURDAIN, F. C. R., TICEHURST, N. F. and TUCKER, B. W., 1943. *The Handbook of British Birds*. Vol. V. London.
- A. P. Gosling, 8 The Walk, Fox Lane, London N13 4AA.