

P.M.Scott on geese on the Wash and the Solway Firth, 1927-1933

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Diaries kept by Peter Scott during his wildfowling years provide useful information on the distribution and feeding habits of 5-6,000 Pink-footed Geese wintering in northwest Norfolk and southeast Lincolnshire. They also record large numbers at the east end of the Solway Firth in September, and include some notes on Barnacle and Greylag Geese in Dumfriesshire.

As readers of his books are well aware, Sir Peter Scott was an inveterate diarist, recording immediately what he saw in the course of his travels as a naturalist and often illuminating his notes with characteristic sketches. Amongst his many unpublished notebooks are six dealing with his activities as a wildfowler and a would-be trapper of live geese during the years 1927-1933, when he was first an undergraduate at Trinity College, Cambridge (1927-1930), then honing his artistic skills at the Munich State Academy (1931) and the Royal Academy Schools, London (1931-1933). Sir Peter gave colourful accounts of some of his wildfowling exploits in his two very successful early books, *Morning Flight* (1935) and *Wild Chorus* (1938). The diaries are more prosaic, and show that, for him as for other fowlers, failures were more frequent than successes. Sir Peter gave up wildfowling after the Second World War. As early as 1932, he had become far more interested in catching geese alive, though it was not until his post-war invention of rocket-nets that he was able to catch large numbers.

At the time when these diaries were written, few naturalists had developed the habit of counting the animals they saw. Sir Peter did whenever possible. There are remarkably few detailed numerical records of geese in Britain before 1940. Because pre-

war records are so scarce, it may prove useful to summarize the entries in the wildfowling diaries that deal with what numbers of geese were seen in the places Sir Peter visited. At that time, geese were far less abundant than they are today, professional wildfowlers were still active, and the ratio of goose shooters to geese was higher than it is now. His comments on feeding behaviour and other habits are also of interest, especially because field cropping practices 60 years ago were very different from those of today.

In the title of this note Sir Peter is referred to as P.M.Scott, the form of his name that he then used (reduced to PMS in subsequent references). His diaries include observations by several companions who remained life-long friends, referred to by their initials, notably C.T.Dalgety (CTD), M.J.Ingram (MJI) and D.Haig Thomas (DHT).

Not many wildfowlers had cars in the late 1920s: 19 October 1929 – Wolferton (Norfolk) “a train load of fowlers arrived at 2.45pm” and raced each other along behind the seawall, with “quite a lot of geese on the sand”. PMS and his friends usually travelled from Cambridge by car; unlike those of today, their cars broke down very frequently. Wildfowling, inland or on the coast, involved long crawls along ditches and wading through tidal

creeks to approach geese already on the ground, or where it was hoped, from previous reconnaissances, that they would come. Much of this approach work was done in darkness, before the morning flight, so that opportunities for careful assessment of the numbers of geese in undisturbed flocks were few.

In December 1927, when the first diary opens, PMS was 18 years old and a beginner, both at wildfowling and in goose identification. By 1933 he was an expert, though perhaps not yet the master of distant recognition that he later became. It is often not clear whether he was going to where he believed the most geese to be, or was returning to the haunts he knew best, using the permissions to shoot that he had already obtained. He rarely roamed widely looking for geese, as we often had to do when rocket-netting in the 1950s.

None of the numbers of geese PMS recorded were intended to be 'regional censuses', though in some cases they may well have included all the geese present in an area. They must be read as no more than guides to local abundance. PMS pursued geese in two areas: (1) along the north Norfolk coast and the east and south sides of the Wash; and (2) around the Solway Firth, from the Esk west to Luce Bay on the Scottish shore and to Moricambe Bay on the south side. His principal quarry was the Pink-footed Goose *Anser brachyrhynchus*, though at different times he saw all the British geese.

This summary of PMS's notes is in two sections, dealing first with his visits to the Wash and then to the Solway Firth. These findings are put into the context of what else has been published about the distribution and abundance of geese in those areas in the late 1920s and early 1930s. Some incidental notes on foods and feeding are of historical interest. Excerpts from the original notes are given in quotation marks.

Geese on the Wash and the north Norfolk coast

The diaries record 101 visits to the Wash and north Norfolk in the six winters between December 1927 and January

1933, including 49 in the first three, while PMS was an undergraduate. He began at Wells and Holkham, on 6-8 December 1927, which he returned to on 16-18 March 1928, after four visits to Terrington in February 1928.

PMS was much more active in 1928-29, visiting north Norfolk twice in November and twice in February, and sites on both sides of the Great Ouse six times in October/November and seven times in January/February.

In 1929-30, PMS visited farms near the Ouse on 14 days between 17 October and 6 February, going only once to Brancaster (2 Nov).

In the autumn of 1930, he was active in the Ouse area on only five days, between 24 October and 22 December, and did not visit the north Norfolk coast. He was in Germany for the rest of the winter.

In 1931-32, PMS was out on 23 days between 31 October and 7 February, mostly between the Ouse and Holbeach, moving further west than he had been before and going inland as far as Tydd.

In 1932-33, PMS spent 23 days, between 30 October and 23 January, at sites from Wolferton to Holbeach, with a single visit to Cley (14 November).

Those details are needed to define what PMS could, and could not, have seen. As he was never present before 17 October or after 18 March, the diaries have nothing to say about early arrivals, and little about spring departures.

Two useful, though slightly puzzling, sheets inserted at the back of the final diary, are headed 'Calendar of Shooting' and 'Pinkfoot Calendar'. These include several dates of major arrivals and departures, some from places he was not visiting himself. Neither sheet is dated. Both are composites of records from several years (given in parentheses in the originals), and seem most likely to have been compiled in the spring of 1933.

The weather in four of the six winters was unremarkable. The winter (December-February) of 1928-29 was exceptionally cold, with a mean temperature of 1.7°C in central England, contrasted with 3.8° to 4.8°C in the other five and a mean of 4.2° (s.d. 1.2°) for 1901-1950 (Parker, Legg &

Folland 1992). The winter of 1931-32 was unusually dry; total rainfall at Spalding 64 mm, compared with 107-178 mm in the other five seasons (Craddock & Wales-Smith 1977).

In a review of the effects on birds of the cold weather of January/February 1929 (Dilke 1930) David Lack contributed records from Salthouse, while PMS dealt with the Wash and the Bedford Levels: "As far as can be judged from very limited experience, 1928-29 was an exceptionally good season for geese."

Pink-footed Geese

North Norfolk coast: PMS saw over 1,000 at Wells on 6 December 1927, and over 2,000 at Holkham the next day. On 18 February 1928 he saw 2-3,000 geese at Wells, a mixture of Pinkfeet and Whitefronts. On 13 November 1928, he noted that there were said to be thousands at Salthouse, but on 14th saw only about 500. There were more than 250 near Docking on 31 October 1929, but only about 100 in the same field on 2 November, when there were 500 geese at the Overy end of the marsh. There are no further records of Pinkfeet from this area, where the situation was complicated by the presence of substantial numbers of White-fronted and Canada Geese, and a few Greylag and Bean Geese.

Southeast Wash (from Snettisham in the north to Holbeach in the west): In February 1928, at Terrington Marsh PMS saw more than 800 on 10th and 600 on 28th.

1928-29. Terrington: several thousand on 27 (CTD) and 28 October (PMS), 500 or more on 28 November, and much larger numbers on 30 November and 1 December. These could not be seen properly, because they were feeding at night, and roosting well out on the Wash, in foggy conditions.

In the cold spell of January/February 1929, the published account (Dilke *loc.cit.*) refers to great numbers of geese in the general area on 20 January, but PMS recorded only small and scattered skeins until 26th, when there were two large groups. On 2 February there was a "huge

mass of geese . . . must have been over 2,000 along the railway" on the fresh marsh at Snettisham, the majority Pinkfeet, with about a quarter Whitefronts. On 7 February there were 300 at north Wootton and "the usual huge lot" at Wolferton, which did not flight out until it was too dark to see them properly. In snow on 14 February the geese stayed all night in the fields. Those shot were reported to be in good condition. Large numbers were still at Wolferton on 22-26 February, only 800 on 1 March.

1929-30: First record, 40 at Terrington on 17 October, flying towards Gedney. At Wolferton: about 550 on 19 and 21 October; on 26th 110 on the ground and "some big bunches" going inland (PMS, MJJ). From November to early February PMS paid nine visits to Skeldyke (Terrington), where there were always large numbers, mostly moving to or from inland feeding places, so that he could make no 'total counts'. On 21 December, at Snettisham, there was a mixed flock of 250 geese, over half of them Whitefronts.

Autumn 1930: On his first visit to Terrington, 24 October, PMS saw only three groups of geese in flight, 210 in all; 200 on 8 November (CTD); at least 110 on 21 November; about 2000 on 8 and 20 December, and 1,100 on 21st; on 22nd they were flying to Sutton Bridge. (PMS was out of the country from December onwards.)

1931-32. Wolferton: 2,000, 24 October (DHT); none found 31 October or 1 November; in November, 800 on 7th, 3,000 on 8th (flying out from inland), morning flight of over 1,000 on 16th, 600-1,000 on 22nd and 28th, and again on 6-7 December.

PMS moved to Terrington for the rest of the winter, often following the Pinkfeet to their inland feeding areas, finding over 600 at Tydd on 14 December, when others were flying past Sutton St. James and towards the northern Washes. On 22 December PMS went first to Tydd St. Mary, where 350 flew past, then searched Sutton St. James, Gedney Hill and Thorney, where he found flocks of 400 and 2-300. The largest numbers he saw on four visits in January 1932 were: "at least 1000" going inland over Sandbanks on 3rd; and at least 2,700 on 17th - "not less than 2000" at

Knarr Fen, 200 at Tydd St.Mary and about 500 near Parson Drove. On 24 January W.Tinsley told PMS that there had been 2,000 at Holbeach since Christmas. On 6 February, PMS saw 300 south of the Whittlesey-Ramsey road, and on 7th, 750 at Knarr Fen and Wryde.

1932-33. PMS began at Terrington, where there were 200 on 30 October and over 400 on 6 November, but only 100 on 12th, and even fewer on 13th. CTD saw 1,000 at Terrington on 27 December. PMS turned his attention to Holbeach, which he visited ten times between 28 November and 23 January. There, Pinkfeet increased from 800 on 28 November to 2100 on 4 December; on 10th PMS found 7-800, in several groups, but on 11th saw at least 5,000, his highest count. On 25 December there were 1,400, on 31st at least 1,000. On 3 January there were 3000 in one field,

with 2,000 in the same field the next day. On 22-23 January there were only 1,200 at Holbeach.

The picture of seasonal shifts in feeding grounds in **Table 1** is partially obscured by differences in PMS's movements. Initially he stayed near the shore and in the northeast. Only after he had met Will Tinsley, who introduced him to the important Holbeach area, did he follow the geese west and inland. Yet the Calendar (**Table 2**) shows that he had arrived at a general picture similar to that of Riviere (1930), who seems to have drawn upon PMS's published notes on the winter of 1928-29.

Table 2 also includes PMS's simplified summary of the choice of foods by Pinkfeet, as given in the original Calendar. The picture that emerges from specific entries in the diaries (**Table 3**) is more varied. As

Table 1. Seasonal maxima of Pink-footed Geese seen on the southeast side of the Wash and inland.
(- = not visited by PMS)

	1927-28	1928-29	1929-30	OND, 1930	1931-32	1932-33
Snettisham/Wolferton	-	>2000 (Feb)	550 (Oct)	2000	(Oct)	
Terrington	800+ (Feb)	800 (Mar)	>1000 (Nov)	2000 (Dec)	3000 (Nov)	1000 (Dec)
Holbeach	-	-	-	-	2000 (D/J)	5000 (Dec)
Inland	-	-	-	-	2000 (Jan)	-

Table 2. Summary of recorded winter movements of Pink-footed Geese in Norfolk and south Lincolnshire, 1928-1933: the "Pinkfoot Calendar", with additions (marked *) from the "Calendar of Shooting".

		Feeding On
September 26	First geese in Norfolk	Stubbles
October 5	150 at Sandbanks	Stubbles
October 20	300 Sandbanks, 500 Wolferton	Stubbles
October 29	*500 Sandbanks (1928)	Young barely
November 8	2000 at Sandbanks; prob. at Tydd	Stubbles
November 16	1500 at Wolferton	Stubbles, potatoes
November 28	First moonlighting	Potatoes (1931)
November 28	First moonlighting	
December 5	Big lots going to Tydd	Stubbles, potatoes
December 5	Big lots going to Holbeach (1932)	
December 13	*First big lots to Tydd	Stubbles
December 20	*Wryde, Knarr Fen, Thorney (1931)	Stubbles, young wheat
December 24	*Main mass at Holbeach (1931)	Stubbles, young wheat
December 30	*Deeping Fen (1931)	
January 17	*Many still at Sandbanks (1932)	

Table 3. Crops on which Pink-footed Geese were feeding in different months, from notes in the diaries, with numbers of geese noted (no. of records in parentheses).

Feeding on	Oct	Nov	Dec	Jan	Feb	Mar	Total
Salt Marsh	350(1)	400(1)	120(1)	–	150(1)	–	1020(4)
Fresh Marsh	–	–	–	–	4500(3)	400(1)	4900(5)
Clover	–	500(1)	3700(3)	–	–	–	4200(4)
Cereal Stubble	450(3)	–	–	–	–	–	450(3)
Bean Stubble	–	100(1)	–	–	–	–	100(1)
Young Barley	500(1)	–	–	–	–	–	500(1)
Young Wheat	–	–	–	200(1)	150(1)	–	350(2)
Plough	–	–	1000(1)	–	–	–	1000(1)
Potatoes	–	4000(3)	5000(6)	100(1)	–	200(1)	9500(11)

those entries are infrequent and chance, not part of a systematic study of feeding habits, it would be inappropriate to draw any strong inferences from them, but they are of some interest. The October record of feeding on young barley (29 October 1928) is supported by a note that a shot bird was full of germinating barley. (Sixty years ago, autumn sowing was much less common than it is now.) The reference to plough (20 December 1931) says that the geese were feeding on a newly-ploughed field, with no sprouting grain. Notes on 20 and 21 November 1932 say that 'some' Pinkfeet had been using a bean stubble for several days. (Field beans were a common crop at that time, and as late as the 1950s, but have now disappeared.) On 12 December 1932: "I believe that geese eat clover more in the afternoon". Have diurnal changes in choice of foods in midwinter since been studied systematically?

Other information on Pink-footed Geese in Norfolk in the 1920s

M.J.Seago (1990) gives a full account of the status of Pink-footed Geese in Norfolk from the 1920s to the 1980s. This makes clear that PMS paid relatively little attention to those using Holkham Marshes, which Riviere (1930) identified as the favourite feeding ground "where they are never disturbed". The geese roosted on Stiffkey High Sands, where "A peak of between 5,000 and 8,000 was attained in the 1930s", before the establishment of an anti-aircraft firing range at Stiffkey in 1938 caused most of the geese to leave the area.

Nor did PMS explore the use by Pinkfeet of the Lower Bure and Halvergate Levels, where a thousand or more fed, roosting on Scroby Sands, off Yarmouth.

West Wash/Fens and East Wash/Snettisham: Seago summarizes the observations of members of the Cambridge Bird Club in the late 1940s and 1950s in the areas where PMS was most active in 1928–1933. They suggest that the patterns of timing and the feeding habits of the geese shown by the diaries remained much the same, though the use of the Nene Washes, some 20 miles inland, for roosting was not clearly established by PMS.

Geese seen on the Solway Firth

PMS visited the Solway Firth (**Figure 2**) seven times in the period covered by the diaries: he was in the Caerlaverock area, 12–22 December 1928; at the east end in late September in 1929, 1930 and 1931 (when he also visited Caerlaverock); ranged widely in February and March 1932: at Caerlaverock and Wigtown Bay in February 1933, and back at Caerlaverock in March 1933. ('Caerlaverock' is used here as a label for the entire coast from Annan to Mersehead, not solely the stretch between the River Nith and the Lochar Water). In 1933 he was trying to catch geese in nets, and his notes are unusually brief and break off before the end of his visit. He paid most attention to Pink-footed and Barnacle Geese, but made some notes on Greylag Geese and on the shooting of some Brent Geese by one of the local professional fowlers.

Pink-footed Geese

Pinkfeet must have been scarce at Caerlaverock in December 1928, because the only references are to a few drifting on the River Nith on the evening of 12th and three seen during the morning flight at East Park on 14th.

In the September visits, PMS was principally concerned with Pinkfeet. On 21 September 1929, he saw about 3,000 on the marsh at Mossbandhall, near the mouth of the River Esk, and at Sarkfoot, a little further downstream, "watched the geese on to the sand in the evening in countless thousands". Back at Sarkfoot at mid-morning on 23rd, "about eight thousand geese (estimated) were sitting on the sand (having presumably fed during the night by moonlight) and another very large number were in the marsh". On 24th, at 5.15 am. most of the geese were already on the sands. That afternoon "the quantity of geese here is quite phenomenal. I have never seen them all by daylight but when the beaters were putting up the geese in the fields at the back of the merse, the pack upon pack which rose with a great roar is something which is so different from the estimated 'so many thousands' on the Wash, that any attempt to get an accurate estimate would be impossible."

In September 1930 large numbers were present at Rockcliffe by 26th, when PMS estimated the morning flight at 6-7,000, while C.T. Dalgety "thought 9-10,000 would be nearer." Large numbers were seen again on 27th and 29th, when one closely-packed flock was estimated at 2,000, with others elsewhere.

In September 1931, only about 2,000 had arrived at Rockcliffe by 27th. That afternoon PMS looked further west, at Glencaple and Stanhope, where J.Scott, the tenant farmer, had seen the first Pinkfeet on the Lochar Sands that morning. On 28th, back at the east end of the Solway PMS saw some Pinkfeet "just arrived from Spitzbergen, having no doubt broken the journey in Norway." He went south on 29th, before the main arrival.

In March 1932, at the east end, 6,000 were seen at Gretna on 24th; but PMS had not yet arrived and there is no diary entry,

the record appearing on the sheet headed "Calendar of Shooting" (referred to in the section on the Wash). On 25th, Mossbandhall marsh was mostly covered by the tide, and it was foggy, but at least 1000 were seen. On 26th, about 4,000 moved past Sarkfoot in the evening. There were about 2,000 on Rockcliffe Marsh at morning flight on 28th. (At the period covered by the diaries, the closing date of the shooting season was March 31.)

The Calendar of Shooting also includes these entries: "Sept.22nd Arrival of Pinkfeet at Gretna. 20,000. Sept.26th First Pinkfeet in Norfolk".

The sheet itself is undated. As noted earlier, it seems likely to have been compiled after 1 April 1933 (the date of the last entry on the Calendar), with the arrival records referring to September 1932.

Greylag Geese

Caerlaverock area; December 1928: 12th, some on the Nith in the evening; 13th, mid-morning, 300 near Caerlaverock Castle; 14th, morning flight, East Park 120; 18th, am, 200 on Bush of Craigs farm (3 km NNW of Bankend), pm "all the Lochar fields were alive with geese, most on grass, some stubble, a few on potatoes" (most of those on grass were probably Barnacles); 19th, am, 200 over Bush of Craig, pm, 200 on East Park merse; 20th, am, 40 on East Park; 22nd, 150 New Mains.

29 September 1931: 7 at Stanhope.

29 March 1932, some on Ruthwell merse; 30th "a lot about", 150 on East Park,

31st 100 on Ruthwell; 1 April, 1000 Kirconnell merse.

March 1933: netting near the Lochar on 17th, 19th (caught two at Bowhouse), 21st, 22nd and 28th, but no numbers in diary.

Wigtown, February 1933: 21st-23rd, 200, Carsewalloch; 24th-26th, some at Glenluce, no numbers; 24th: 102 on Sands of Luce. Moricambe Bay, Cumberland: 50 at Anthorn, 16 March 1933.

Barnacle Geese

Caerlaverock, December 1928: 13th "Raines, a gunsmith from Carlisle, said that there were more Barnacles at Newton

Arlosh" (Moricambe Bay) (does this mean 'more than at Caerlaverock', or simply 'some'?); Caerlaverock, 14th, afternoon, about 1000 flew out to Nith; 15th, over 1200; Lochar, 17th 200 + "huge skein"; 18th "fields alive with geese" (see Greylag, above); East Park, 19th, pm "coming in to feed under the moon", 20th, am, 2-300.

29 September 1931, some at Stanhope.

March 1932: about 1,500 on Stanhope, 27th; some on Ruthwell merse on 29th, 30th, 200 on 31st; 1,500 at Glencaple, 1 April. (from Calendar of Shooting; not in diary) March 1933: 16th, was told that only 300 at best at Anthorn (Moricambe Bay) this season, now only about 20. 17th -28th, trying to net Barnacles and Greylags, mostly near the Lochar, where Barnacles noted on 28th. Caught two at Mersehead, 25th.

Brent Geese

Glencaple, 27 September 1929. J.Wilson, a professional fowler, and others had shot nine out of a flock of ten Dark-bellied Brent. PMS noted that they weighed only 2½ lbs, instead of 3½ to 4 lbs, yet were in splendid condition and fat as anything. It is not clear whether PMS actually saw the geese; and improbable that he weighed them, because the likelihood of nine geese all weighing 2½ lbs must be small. Dark-bellied Brent are not known to have used the Solway regularly. This is an early date.

Comments

Pink-footed Geese

The most notable of these records are the very large numbers recorded in late September, soon after their arrival. Berry (1939): "In most seasons small parties of Pinkfooted Geese begin to arrive on (the eastern section of) the Solway about the last week in September. During October the average strength of the flock has been estimated as from sixteen to twenty thousand. After a stay of a month or six weeks the birds begin to disperse. During the first twenty years of this century an enormous increase was observed; to a

slight extent this is thought to be continuing, but comparatively little change has been noticed for some seasons. Except for this one district, "... the Pinkfooted is *not* a common goose on the Solway."

Though PMS was wrong, in 1931, in supposing that the Solway Pinkfeet came from Spitsbergen, he was the first to prove by ringing, in the early 1950s, that they, and indeed all British-wintering Pinkfeet, breed in Iceland and east Greenland.

The Solway continued to be one of the main arrival places until the 1950s, although by that time the main concentrations were at Caerlaverock, rather than on the saltmarshes at the eastern, inner end of the firth. Subsequently, the Solway has become more important to Pinkfeet in late winter than in early autumn.

No one knows how large the Icelandic population was in the early 1930s. It seems unlikely to have been larger than it was in the early 1950s (about 30,000), so that the presence of 20,000 on the Solway in late September represented a very large part of the entire population.

Greylag Goose

Berry (1939): "Rare before 1890, then a very great increase until about 1925, since when little change in total numbers has been noted... This is the commonest species in Solway, but in the east of the area it is outnumbered by the Pinkfooted during migration."

Barnacle Geese

As E.L.Roberts has described (in Atkinson-Willes 1963), the numbers of Barnacle Geese on the Solway fell sharply in the 1930s, from about 2,000 in spring in 1933 and 1934, to only 500 by 1939. The numbers seen by PMS in March and December 1932 (1,500 and 1,200 respectively) are unlikely to have been complete counts, because then, to an even greater extent than at present, the geese were spread across several sites, from Moricambe Bay and Rockcliffe Marsh on the Cumberland shore to Caerlaverock,

the Lochar Water and Mersehead. In the 1930s, visiting all the potential sites in one or two days would have been a more formidable task than it is now.

The cost of goose-chasing

At the end of his visit to the Solway in September 1929, PMS left Sark Bridge

“having paid four guineas for the eight days. Rather too much.” He went west, to Creetown, before returning to London, when he noted that he had driven “380 miles in 10¾ hours, an average speed of 35 mph. On the whole my ten days in Scotland have been well worth the ten pounds they cost.”

I am much indebted to Lady Scott for the opportunity to read the diaries and for permission to publish records from them. Dr Jennifer Gill, whose knowledge of the present-day activities of Pink-footed Geese in Norfolk and south Lincolnshire is even more comprehensive than that of PMS sixty-five years ago, helped identify some of the sites he referred to, made useful suggestions and sent me a copy of the paper by M.J.Seago referred to above.

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