

REFERENCES

Most of the old writers referred to are already well known to naturalists and require no further reference details. Other publications less often quoted, and some short notes, have the full titles given in the text.

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POPULATION STUDIES OF CLYDE SEABIRDS

PART TWO

By J. A. GIBSON

(Continued from Transactions, Vol XVII, page 95)

This part contains the remaining auks — the Guillemot and the Razorbill, and the less common gulls — the Greater Black-backed Gull and the Kittiwake.

8. GUILLEMOT *Uria aalge* (Pontopp.)

Ailsa Craig:

Ailsa Craig is an ancient nesting-site of the guillemot, but history shows a steady decline in its numbers. This has been due to the combined effects of man, rats, oil and gulls. I have already given the history of the colony in some detail (see *Scot. Nat.*, 63: 73-100, 159-177), and shall not repeat this here. Sufficient to say that from the mid-19th to mid-20th century the guillemot population of Ailsa Craig probably declined from some fifty thousand pairs to five thousand pairs. This was contributed to by several immense natural disasters and latterly by extensive oiling. A summary of these disasters affecting the guillemot and razorbill populations is given in a separate paper. Within recent years my counts of the number of nesting pairs have been as follows: 5381 in 1950, 5043 in 1951, 5112 in 1958, 5099 in 1960, 5132 in 1964, 4201 in 1967, 4223 in 1968, and 4177 in 1969. The recent reduction in population, first noted in 1967, may well have some connection with the Torrey Canyon disaster, although this, of course, is impossible to prove.

Sheep Island:

A few pairs of guillemots began to breed on the cliffs of Sheep Island in the late 1920s or early 1930s. The exact date is not now known, but at any rate it was certainly a few years after the arrival of some razorbills. Guillemots slowly increased and in the early 1940s there were some twenty-five pairs nesting. Mr Duncan Colville tells me, however, that about 1944 nearly all the guillemots deserted Sheep Island and one or two pairs began to nest on Glunimore. Since then their numbers have fluctuated considerably. Borland and Walls saw only one pair off Sheep Island, "believed to be breeding", and I found one pair with an egg in 1953. There were seven pairs in 1960 but none at all in 1964, although in 1969 there were at least ten pairs nesting.

Glunimore:

One or two pairs of guillemots began to nest on Glunimore about 1944. There was possibly one pair in 1951, but at least ten pairs were nesting in 1955. In 1960 I could find none at all, but since then one

or two have nested each year. There were at least fourteen pairs nesting in 1968, but only four pairs in 1969.

Mull of Kintyre:

A few guillemots have nested on the ledges at the Mull of Kintyre cliffs since at least the late 1930s, but I can find no evidence that the colony existed much before this date. The colony is never large and the guillemots are always outnumbered by razorbills. The best year I have was 1960 when there were about twenty pairs. In 1969 at least fifteen pairs of guillemots were nesting.

Little Cumbrae:

In view of occasional reports to the contrary it is worth recording that guillemots and razorbills do not nest on the Little Cumbrae. They are often to be seen on the surrounding seas, and I have seen them roosting on the miniature sea-cliff, but to the best of my knowledge no eggs or young have ever been found.

South Ayrshire Cliffs:

Much the same remarks apply as to the Little Cumbrae. For nearly thirty years I have seen small numbers of guillemots, and a few razorbills, roosting on the south Ayrshire cliffs, where there is indeed an abundance of suitable nesting-sites, but to the best of my knowledge no eggs or young have ever been found. I have been given occasional casual reports of auks nesting here, but all those that I have investigated have turned out to be inaccurate.

South-West Knapdale Cliffs:

In the *Scottish Naturalist* for 1937, page 167, there is a report of a few pairs of guillemots breeding on the south-west Knapdale cliffs, and this statement is repeated by Baxter and Rintoul in their *Birds of Scotland* (1953). Although this site is outwith the Clyde sea area it is worth recording that although I know of several places where guillemots are roosting, I have never at any time been able to prove breeding, so the locality of this breeding site is unknown to me. It was also unknown to McWilliam.

Summary:

Guillemots nest at four stations in the Clyde area, although last century they apparently nested only at one site, Ailsa Craig, which still contains the vast majority of the Clyde breeding population. They have also been incorrectly reported as nesting at two other sites. During the past century the population has undergone a disastrous decrease; the total Clyde breeding population within recent years has been as follows:

1951		c. 5050 pairs
1958		c. 5128 pairs
1960		c. 5126 pairs
1964		c. 5155 pairs
1968		c. 4262 pairs
1969		c. 4206 pairs

9. RAZORBILL *Alca torda* L.

Ailsa Craig:

Ailsa is a very ancient nesting-site of the razorbill, although in numbers the razorbill has always been far outnumbered by the guillemot. There is no good evidence that the razorbill has undergone the same degree of decrease in population as has the guillemot, although recently some fluctuation in numbers has taken place. Within recent years my counts of the number of nesting pairs have been as follows: 2159 in 1950, 2612 in 1951, 2599 in 1958, 2386 in 1960, 2314 in 1964, 2016 in 1967, 2259 in 1968 and 2276 in 1969.

Sheep Island:

Razorbills began to nest on Sheep Island in the late 1920s. They seemed to establish a stable colony and increased steadily, and by 1950 there were at least fifty pairs nesting here. Since then there has been a steady and uninterrupted increase, and the population on Sheep Island was some 252 pairs in 1969.

Glenimore:

A few pairs of razorbills began to nest on Glenimore in the mid-1920s. They increased steadily, with about 50 pairs by 1950, and in 1969 my count showed some 156 nesting pairs.

Mull of Kintyre:

The razorbill colony on the Mull of Kintyre was certainly established by 1930, although I am unable to get any earlier evidence. Although small it has remained reasonably stable, always with more razorbills than guillemots. Within recent years the population has fluctuated very little round about fifty pairs, and in 1969 my count showed forty-two nesting pairs.

Little Cumbrae:

As with the guillemot, it is worth noting that razorbills do not nest on the Little Cumbrae, because they have occasionally been incorrectly reported as doing so. Auks are often to be seen on the surrounding sea, and I have occasionally seen a few razorbills roosting on the miniature sea-cliff, but to the best of my knowledge no eggs or young have ever been found.

South Ayrshire Cliffs:

Again much the same remarks apply as to the Little Cumbrae. A few razorbills can be seen from time to time roosting on the south Ayrshire cliffs where there are suitable nesting sites, and although I occasionally get reports of razorbills nesting, I have never been able to get proof by finding eggs or seeing young.

Summary:

Razorbills nest at four stations in the Clyde area, although last century they apparently nested only at one, Ailsa Craig, which still contains the vast majority of the Clyde breeding population. They have also been incorrectly reported as breeding at two other stations. The total Clyde breeding population within recent years has been as

follows:

1951	c. 2752 pairs
1958	c. 2754 pairs
1960	c. 2556 pairs
1964	c. 2574 pairs
1968	c. 2634 pairs
1969	c. 2726 pairs

10. GREATER BLACK-BACKED GULL *Larus marinus* L. Inch Moan, Loch Lomond:

Gray (1871) recorded several pairs nesting on Inch Moan, but they were no longer nesting there by 1895 when Lumsden and Brown wrote their *Guide to the Natural History of Loch Lomond*. By 1946, however, greater black-backed gulls were again nesting on Inch Moan, and may well have been doing so for some considerable time. Three or four pairs were nesting in 1950 and they have continued to do so since then, although all the seabirds on Inch Moan have fluctuated in numbers considerably, presumably due to the frequent interference by visitors. Birds are present every year, but whether or not they nest successfully is another matter. There were at least two pairs nesting in 1969.

Ailsa Craig:

Walker (1868) and Gray (1871) each recorded greater black-backed gulls nesting on Ailsa in small numbers, but by 1901 Paterson was writing "possibly nests on Ailsa Craig" so it seems to have undergone a change in status. Seven years later Berry (1908) wrote "whatever it may have done in the past, I fear at the present time it does not breed here". In 1922 McCrindle found a pair nesting on Ailsa, and there had been odd reports of breeding for a few years previously. By 1936 it was nesting fairly regularly on Ailsa, and since then the population has become well established. There were at least twelve nests in 1950 and seven nests in 1951. The population peaked to at least thirty-two nests in 1964 (occasional suggestions of much higher breeding populations are considerable exaggerations), with a good many non-breeding birds also present. There were at least thirteen nests in 1968 and at least eighteen in 1969.

South Ayrshire Cliffs:

J. M. McWilliam found the nest of the greater black-backed gull on the south Ayrshire cliffs in May 1922. John McCrindle, commenting on this record, said that he had taken the nest of the greater black-backed gull in the same locality over twenty years ago, i.e. about 1902 (*Scot. Nat.*, 1923: 51, 184). This would appear to be the first published record of the greater black-backed gull nesting on the Ayrshire mainland. I saw several pairs of greater black-backed gulls nesting on the south Ayrshire cliffs on many occasions during the 1940s and 1950s, and had good reason to believe that it was nesting there regularly in small numbers. Adult birds are certainly present every year, but it is not always possible to prove breeding.

The largest number of nests I was ever able to locate was seven in 1960, and it now seems to be well established. There were at least five nests in 1969.

Lady Isle:

According to Wilson (1954) the first record of the greater black-backed gull nesting on Lady Isle was in 1952. I certainly know of no earlier record. It increased fairly rapidly and there were four or five pairs nesting in 1954. There were six nests in 1960, but there has been a slight decrease since then, and only three pairs were nesting in 1969.

Horse Island:

The earliest record known to me was one pair nesting in 1953, and I shall be glad to hear of any earlier information. Greater black-backed gulls have nested less regularly on Horse Island than on Lady Isle, possibly owing to greater disturbance, but two or three pairs usually nest each year. Three pairs appeared to be nesting in 1969.

Dunure:

McCrindle recorded a pair nesting near Dunure in 1922. A pair nested here in 1944 and again in 1948, but I know of no later record.

Little Cumbrae:

I have known the greater black-backed gull to nest on the Little Cumbrae since 1946. Dr. Cairnie said it did not nest here before the war, so it probably started nesting in the early 1940s. It has increased steadily, and in 1969 there were at least seventeen nests; a good many non-breeding birds were also present.

Inchmarnock:

McWilliam records that in 1918 one pair of greater black-backed gulls nested on Inchmarnock; in 1921 there were three pairs, but only single nests in 1924 and 1925. In 1937 there was still only one nest, but it has steadily increased since then, and there were eight pairs in 1953 and fourteen pairs in 1960. In 1969 there were at least twenty-two pairs, nesting all round the island except the mid-east.

Holy Island:

A few pairs have nested on Holy Island since at least 1944, and the numbers do not seem to vary very much. The highest total known to me was six pairs in 1960. In 1969 there were four nests.

Pladda:

Two pairs have nested on Pladda since 1966. This was still the size of the population in 1969.

Burnt Islands, Kyles of Bute:

One pair of greater black-backed gulls was nesting on the Burnt Islands in 1963, which may well have been the first record. I have no further records of breeding until 1968 when there were four nests,

and there were again four nests in 1969.

Bute, North-East Moors:

One or two pairs of greater black-backed gulls have nested intermittently on the north-east moors of Bute. I found one nest in 1964 and two nests in 1966, but have no other records. There appeared to be no greater black-backed gulls present here in 1969.

Arran, Boguillie Hill-Lochs:

Gray (1872) recorded the greater black-backed gull as "Tolerably common. It breeds, though not in great numbers, in some of the lochs of Arran". There can be little doubt that the hill-lochs known to Gray were these little lochs at the Boguillie, where greater black-backed gulls have been known to nest for over a century. All the other sites on Arran have been occupied for the first time within my own lifetime. The greater black-backed gull is steadily increasing on Arran. In 1944 there were thirty-two nests at this colony, forty-seven in 1958, at least seventy-five in 1964 and in 1969 there were ninety-two occupied nests.

Arran, Cock of Arran:

A pair of greater black-backed gulls was nesting at the Cock of Arran in 1964, and in 1969 there was still one pair. These are my only records.

Arran, Loch Tanna Moors:

The widely scattered gull colony of lesser black-backed, greater black-backed, herring and common gulls on the Loch Tanna moors became established in the early 1940s. It has slowly built up since then, although fairly extensive collection of eggs keeps the colony under some control. There were at least four pairs of greater black-backed gulls here in 1951, eleven nests in 1964, and in 1969 there were eighteen nests.

Arran, Loch Iorsa to Loch Nuis:

A thinly scattered mixed gull colony of lesser black-backed, greater black-backed, herring and common gulls over moors and marshes, known since at least the mid-1940s. A slow increase since then, much curtailed by egg-collecting. Four pairs of greater black-backs in 1958 and 1960. Three in 1964, five in 1967, and five nests in 1969.

Arran, Kilpatrick Moors:

This is a widely scattered gull colony much the same as at Loch Tanna, and it, too, was established in the early 1940s and is kept under some control by fairly extensive egg-collecting. One or two pairs of greater-black-backed gulls have nested here since at least 1951. There were three nests in 1960, two nests in 1964 and at least twelve nests in 1969, which was a considerable increase.

Arran, Loch Garbad:

One pair of greater black-backed gulls was nesting at Loch

Garbad in 1968 and in 1969. These are my only records.

Kintyre, Hill-Slopes North of the Mull:

This is a widely scattered, mixed gull colony of lesser black-backed, greater black-backed, herring and common gulls which has existed since at least the late 1930s, and is slowly but steadily increasing, although egg-collecting exercises some degree of control. Greater black-backed gulls began to nest here about the mid-1940s. It is a widely scattered colony and estimates of population are difficult, but for many years there has been in the region of a dozen pairs of greater black-backs nesting. This was the size of the population in 1969.

South-West Kintyre:

Three nests in 1964 and two nests in 1969. This site in steep gullies on the west Kintyre cliffs near Dun Ban, some two miles north of the Mull lighthouse, is difficult of access and these are my only records.

Mull of Kintyre:

My first record is in 1946 when at least two pairs were nesting, although they may have been nesting for some years before that. I could find none in 1958. There was at least one nest in 1960, two nests in 1964 and in 1969 there were at least three pairs nesting.

Sanda:

One pair was nesting in 1969. This is my first record, and on many previous visits to the island the greater black-backed has certainly been absent as a nesting species.

Glumimore:

The greater black-backed gull has long been known to nest on Glumimore, and single nests were found on the island by John Paterson and John Robertson in 1898 and 1900. Duncan Colville knew of at least a dozen pairs nesting in the early 1930s. From then on it increased steadily and the colony on Glumimore, which is very variable, had reached thirty pairs by the early 1950s, the nests all being packed tightly together on top of the island. Oddly enough, the nests are often in close proximity to eiders' nests. There were thirty-four nests in 1960, but only fourteen in 1964. In 1969 there were sixteen nests.

Sheep Island:

John Bain noted the absence of greater black-backed gulls from Sheep Island in the late 1940s, but Borland and Walls found two pairs nesting there in 1951, which was possibly the first record. In 1954 I found six nests. There were five nests in 1960, four nests in 1964, five nests in 1968 and five nests in 1969.

Kintyre, Loch An Eilean Group:

Known to nest here since at least the late 1940s. A widely scattered, mixed gull colony. I saw four pairs of greater black-backed

gulls nesting in 1949. Eight nests in 1958, seven in 1960, twelve in 1967 and sixteen in 1969.

Kintyre, Loch Romain Group:

Nesting since at least 1958 and very probably much earlier. A widely scattered, mixed gull colony. Seven pairs of greater black-backs in 1958, five pairs in 1960, seven pairs in 1967, five pairs in 1969.

Knapdale, North Moors and Hill Lochs:

A mixed gull colony of lesser black-backed, herring gull, greater black-backed and common gull. Thinly and very widely scattered. Two or three pairs of greater black-backed gulls in 1960, at least four pairs in 1969 and possibly more.

Loch Fyne, Glas Eilean:

One pair in 1960, one pair in 1964 and one pair in 1969.

Loch Fyne, Eilean Buidhe:

I found about twenty pairs of greater black-backed gulls nesting in 1947, and about thirty pairs in 1954. Borland and Walls found thirty-eight nests in 1956. There were some twenty nests in 1964 and again twenty nests in 1969.

Loch Fyne, Sgat Mor:

McWilliam found a pair nesting in 1924, which appears to be the first record. Between seven and twelve pairs were nesting in the late 1940s, and twelve pairs were found in 1951 and 1954. Borland and Walls found at least twenty pairs nesting in 1956. There were eighteen nests in 1964, and twelve in 1968 and 1969.

Loch Fyne, Sgat Beag:

McWilliam found one pair nesting in 1924, which appears to be the first record. There was again one pair in 1950, but I know of no record since then.

Summary:

A century ago we had definite knowledge of the greater black-backed gull nesting at only three sites in the Clyde Area — Inch Moan, Ailsa Craig and Arran — although there were possibly one or two other sites unrecorded. There are now at least thirty known breeding-sites in the Clyde area, and about half of these have been colonised within the last thirty years. There is no doubt that the greater black-backed gull is steadily increasing its range and population within the Clyde area. The total Clyde breeding population within recent years has been as follows:

1951	c. 168 pairs
1958	c. 227 pairs
1960	c. 240 pairs
1964	c. 262 pairs
1968	c. 280 pairs
1969	c. 301 pairs

11. KITTIWAKE *Rissa tridactyla* (L.)

Ailsa Craig:

The very large colony on Ailsa dates from the most ancient times. There are frequent references to the Ailsa kittiwakes by Robert Gray and the other 19th century writers, and there are written notes on the colony extending back to the 17th century. The first attempt to make an accurate assessment of the size of the colony, however, appears to have been my own census in 1950 which gave 7104 nests. In 1951 this count was repeated and gave 7217 nests. There were some 7250 nests in 1958 and approximately the same in 1960 and 1964. Detailed counts gave 7801 nests in 1968 and 7742 nests in 1969. There is no good evidence that the size of the colony has ever fluctuated very much.

Sheep Island:

Kittiwakes first began to nest on Sheep Island in the late 1920s. They increased very slowly and Mr. Duncan Colville tells me that there were at least ten pairs there in 1943. Round about that time, however, the kittiwakes seemed to leave Sheep Island for Glunimore, and in 1953 I could only find one nest. By 1958 there were some half-dozen scattered nests, however, and there has been a slow increase since then, up to the present population of twelve nests in 1969.

Glunimore:

Kittiwakes began to nest on Glunimore in the mid-1940s, apparently by extension from Sheep Island. The colony was slow to start and in 1951 there were only three pairs. There were twenty nests in 1956, and twenty-eight nests in 1959. There has been a slow increase since then, and there were forty nests in 1969.

Sanda:

A few kittiwakes have nested intermittently on Sanda since the late 1940s. This colony was slow to get started, but by 1959 there were some sixty pairs nesting amongst the fulmar colony on the south-west cliffs. Since then, however, the Sanda kittiwakes have steadily decreased and during the past few years there have been very few kittiwakes nesting here. In 1969 there were only six widely scattered nests on the whole island.

Mull of Kintyre:

There is a small colony of kittiwakes on the Mull of Kintyre. I have known it since 1946, and I am told that a few kittiwakes were nesting there in the mid-1930s. The colony may not be much older than this, however, and there is certainly no mention of it in any of the works by Robert Gray. The nests have varied between twelve and twenty, fairly widely scattered along the cliffs, and the colony does not appear to be very stable. There were ten occupied nests in 1969.

Pladda:

A kittiwake with a damaged wing was found by the daughter of the principal lightkeeper, Mr Henderson, late in 1950. She kept

it as a pet and it was able to fly in a clumsy fashion. In 1951, 1952 and 1953 this bird found a mate, and nested successfully on the south cliffs about fifteen feet from the base. No nesting took place after this date, and there have been no later records.

Little Cumbrae:

The *Third Statistical Account* (1962) says "Kittiwakes have nested for years in one or two places on the hills". This is a mistake for the common gull. The kittiwake is a cliff nester which does not nest on the Little Cumbrae, even on the miniature sea-cliff on the west.

South Ayrshire Cliffs:

For the past thirty years I have known kittiwakes to roost in large numbers on various places on the south Ayrshire cliffs, and on the shore below. This was also well known to, and well described by, Robert Gray in the mid-19th century. On several occasions I have investigated reports of kittiwakes nesting on the south Ayrshire cliffs, but none of these reports have turned out to be accurate and have presumably arisen from casual observation of the roosting birds. There is an abundance of suitable nesting sites, however, and birds are certainly present in large numbers right throughout the summer, so it would not be unduly surprising if kittiwakes did in fact one day nest here.

Finnarts Bay:

A report on the "Status of the Kittiwake in the British Isles" in *Bird Study* for September 1963 includes the following passage (page 171): "Finnarts Bay (E. side of Loch Ryan). A small station consisting of 12-15 pairs was found in 1954 (J. Murray). J. A. Gibson failed to find any nesting in 1960". In my view this report of nesting could not possibly be correct. Finnarts Bay consists of a grassy headland running down to the sea, with no cliff suitable for kittiwakes. The only cliffs are further north where the kittiwakes habitually roost (see above).

Summary:

Kittiwakes nest at five stations in the Clyde area. Last century they nested only at Ailsa Craig, which still contains the vast majority of the Clyde population. Kittiwakes have also nested at one other site in semi-tame conditions, and have been incorrectly reported as nesting at three other sites. The total Clyde breeding population within recent years has been as follows:

1951	c. 7250 pairs
1958	c. 7348 pairs
1960	c. 7337 pairs
1964	c. 7326 pairs
1968	c. 7866 pairs
1969	c. 7810 pairs

(To be continued)

THE REPTILES AND AMPHIBIANS OF THE ISLAND OF BUTE

By J. A. GIBSON

No account of the reptiles and amphibians of the Island of Bute has previously appeared, so these notes are based entirely on my own collecting during the past thirty-five years. I shall be very grateful to anyone who can add to the information.

REPTILES

SLOW-WORM *Anguis fragilis* L.

Fairly common and widely distributed throughout Bute, although since it is retiring by nature is not often seen by the casual observer and has to be searched for. I have many records from Inchmarnock.

COMMON LIZARD *Lacerta vivipara* Jacquin

Widely distributed throughout Bute and also common on Inchmarnock. I have one record from the Burnt Islands, on 7th July 1955.

GRASS SNAKE *Natrix natrix* (L.)

There are no grass snakes native to Bute, but in the early years of the second world war a pet shop in Rothesay was selling grass snakes. I bought one myself and took it back to the mainland. I gather that several of these grass snakes ultimately escaped, as is so often the case, but there is no evidence that they survived or bred.

ADDER *Vipera berus* (L.)

I know of no true record of the occurrence of the adder on Bute, although it is relatively common on the adjacent mainland of Argyll, in some places particularly so. From personal knowledge I know that several adders captured in Cowal were released in north Bute in the early 1940s, more or less as a schoolboy prank. It may be that this has been done on more than one occasion, although it is to be hoped that the experiment will not be repeated. I have no evidence, however, that any of the adders so released survived. Any other information will be welcome.

AMPHIBIANS

COMMON TOAD *Bufo bufo* (L.)

Fairly common and well distributed throughout Bute. I have no records from Inchmarnock.