

# FORTH ISLAND SEABIRD COUNTS 1977

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The frustrations of island-going were more evident this year than ever before. The first Lamb/Fidra trip was postponed because of a gale and heavy rain. On the second we could not land on Fidra and there were several wet feet - and knees - because of the heavy north-east swell as we came off the Lamb. The Inchkeith trip was cancelled when the boat was put out of action by thieves. Fortunately we were able to make a private trip to do the count. Another cancellation was the annual trip which we have made round the 'other' islands of Inchgarvie, Inchcolm and the small islets. An alternative small boat trip found us going round the harbour with a faulty engine - and another wasted night. Stan da Prato had better luck at the next attempt and I am grateful to him for completing the counts. The RSPB have again kindly supplied counts on Inchmickery and also their counts on Fidra. These are not strictly comparable to ours but I am extremely grateful for these counts to fill in the missing figures.

Many of our sea-birds have been increasing in numbers since the beginning of this century. The situation may soon be reached in the Forth when their numbers will be limited by such natural factors as the availability of food or nest-sites rather than by human predation. When this happens it may well be the first time for many hundreds of years.

In this connection, the mechanics of population control in the Cormorant are interesting. Disturbance at the long-established Farnes colony may well have been a factor in the establishment of the Lamb colony in 1957. Similarly, disturbances on the Lamb in 1966 led to the first nesting on Craigeleith. In 1976 instead of the expected 220 nests on the Lamb there were only 150 - probably caused by unauthorised landings in May. And now this year, as well as a record 38 nests on Craigeleith, Cormorants have started a small colony on some islets near Inchmickery, known as the Cow and Calves. On 24th June, Stan da Prato found 11 nests there and there were 30 adults ashore. On the Lamb itself there were 157 nests giving a combined total of c206 nests for the whole of the Forth which would be a near-average figure for the Lamb.

Cormorant colonies in Britain seem to be limited in size to a maximum of between 200 and 300 pairs. This is probably due to an internal population control mechanism (what Wynne-Edwards calls a homeostatic or self-balancing system) rather than to any immediate food shortage - though in the long run it may be designed to prevent just that. During the initial rapid build-up of Cormorant numbers on the Lamb there was a drop in the size of the Farnes colony but it soon recovered to its original 220-250 pairs. The numbers on the Lamb reached the 280 mark before settling down to nearer 250 pairs. This suggests that although the breeding population of a colony of Cormorants does not rise beyond its self-imposed maximum, there must be a considerable non-breeding population which will nest if given the opportunity. Cormorants cling tenaciously to traditional breeding sites, and the colonisation of a new area or even of an island adjacent to an established colony, represents the breaking of a strong psychological barrier. The Lamb and Craigeleith group have behaved as one colony keeping within its permitted population limit. Now there is this extension of range to the Cow and Calves. The interesting question is what will happen with the Inner Forth birds? Will they behave as part of a single Forth colony with a self-regulated peak or will the two groups be able to increase in numbers beyond a single colony limit?

Another interesting Cormorant development is a new colonisation on islets near Fast Castle. Birds bred there in 1976 and there were 34 nests on 24th May this year. There is space on these islets for a

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much increased number of nests but perhaps the near presence of the two large colonies of Farnes and Lamb may have an inhibiting effect. We shall follow the fortunes of this colony with interest.

Although the Cormorant is flourishing, its smaller cousin, the Shag, is undergoing a spell of severe reduction in numbers. During the first 16 years of our counts the Shag population doubled on average every seven-and-a-half years. So it was four times more numerous on our islands in 1974 than it was in 1959. Since then, there have been three years of decrease on the East Lothian islands, with numbers dropping from 507 to 355 nests (down 30 per cent). The Inner Forth birds, on the other hand, are still increasing with 47 breeding pairs on five islands compared with 27 in 1976. The 1975-76 decreases were attributed to deaths caused by 'red-tides' but there has been no report of such a phenomenon this year. Human disturbance or pollution can probably be ruled out as a relevant factor in the decline. So there must be a natural cause (or causes). Red-tides, shortage of food in summer or winter, displacement by other species (as Guillemots on the Lamb)? - time may provide an answer.

Of the other species, Guillemot continues to do well with three pairs breeding on Inchkeith (first nest was in 1976) and some 600 pairs on Lamb. Puffin counts are down and so apparently are the numbers of chicks, but this is a difficult species to census and it is hoped that 1978 will show a clearer picture. Another auk - a Black Guillemot - summered in breeding plumage, being first seen off Craigleith in May then later at Fidra. There seems no reason why this bird should not, one day, breed in the Forth. Of recent colonisers it is worth mentioning the first Great Black-backed Gull nest on the Bass, and two pairs were proved breeding on Craigleith.

### Reference:

*Wynne Edwards, V.C. (1962). Animal Dispersion in relation to Social Behaviour. Edinburgh and London.*

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	Inchmickery/ Islets	Inchkeith	Fidra	Lamb	Craigleith
Fulmar		445	54	3	60
Cormorant		11		157	38
Shag	7	5	6	18	186
Greater Bl Back					2
Lesser Bl Back	5	c350	20	c5	?200
Herring Gull	c80		c400	c300	c3000
Kittiwake		338	227	95	490
Common Tern	548				
Roseate Tern	54				
Sandwich Tern	580				
Razorbill		20	5+	18	65
Guillemot		3	10+	600	1500 bds
Puffin		450 bds	51		950 bds

Fulmar - occupied sites, not necessarily breeding

Craigleith Guillemots - birds on breeding cliffs

Puffin - all birds, on land and offshore

All others - pairs or nests

x - present but not counted; c- about

Inchmickery and Fidra counts by kind permission of the RSPB

Please note that the numbers in this table may not agree with those in the main Forth Seabird Group tables. In some years some islands were counted more than once. When this happened the Forth Seabird Group figures reflect the main count.