

THE MAMMALS OF THE ISLAND OF BUTE

By J. A. GIBSON

No detailed account of the mammals of the Island of Bute has previously appeared, so these notes are offered in an attempt to fill a gap in our knowledge of Clyde natural history. In common with most of the islands of the West of Scotland, Bute received its fair share of visits from the early travellers, but neither they nor the *Old* or *New Statistical Accounts* give any serious notes on the mammals. The first significant account of Bute natural history appears in Blain's *History of Bute*. John Blain came to Rothesay in 1761 and lived there until his death in 1820. He held many appointments, including that of Town Clerk, and was also for some time factor to the Bute Estate. He wrote his *History* shortly before his death, and it remained unpublished until 1880. His book is not easily accessible, and since his notes on the mammals are of some interest they are worth quoting in full:

'The quadrupeds of this island are the horse, cow, sheep, hog, dog, house cat, Muscovy and black rat, house, water, and field mouse, bat, mole, hare, weasel, and otter. There is neither fox, badger, nor fulmart; they had been early exterminated. A few foxes, however, had swimmied from Argyllshire, across the Kyle, some years prior to 1731, or, according to a traditionary account, were carried in by evil-disposed persons and set at large, where they soon multiplied and became a general pest, which induced the heritors and people of Bute in the year just mentioned to take measures for rooting them out. The mode they adopted was to contract with one, William Johnston, a fox-killer by profession, to clear the island of those animals within the space of two years at the longest for twenty pounds sterling, besides provision to himself and his dogs, to be provided gratis by the people within whose bounds he might have occasion to hunt whilst he was actually engaged in such public service. Bute has ever since remained clear of this destructive vermin.'

After Blain the next account is by John Colquhoun, the well known writer on field sports. He lived on Bute at one time, and in his volume *Sporting Days*, published in 1866, there is a chapter on 'Natural History and Sport of Bute'.

This paper is rather disappointing, however, for Colquhoun was more of a sportsman than a naturalist. In the several papers by Alston and Boyd Watt in the late 19th and early 20th century there are, of course, many references to Bute mammals, although these authors more often point out where knowledge is lacking, and indicate that much work still needs to be done on the islands.

In the years immediately preceding the first world war a group of workers from the British Museum (Natural History) led by M. A. C. Hinton, later to become Keeper of Zoology in the Museum, carried out extensive collecting of small mammals on the Western Islands of Scotland, including Bute. The purpose of this work was not to study the distribution pattern, but rather to investigate and establish some sub-specific forms. The conclusions arrived at were published in a series of papers (see, for example, an important one by Hinton in *Annals and Magazine of Natural History*, 1914, pages 117-134) and were later incorporated in the uncompleted *History of British Mammals* by Barrett-Hamilton and Hinton (1910-1921). That these studies did not meet with universal approval is evinced by criticisms made by the editors of the *Scottish Naturalist* at that time, who pointed out that much of the evidence on which these races were based depended upon intricate cranial measurements, and had almost no application for the field naturalist. I very much agree with this criticism. For me the species is always the basic unit, and the discussion of these races, which at best is largely a matter of opinion, is quite outwith the scope of this paper. It is refreshing to discover that a recent authority, Dr. G. B. Corbet, Head of the Mammals section in the British Museum (Natural History), has expressed similar views. Nevertheless this work did result in a number of interesting distribution records.

In 1919 L. P. W. Renouf, later to become Professor of Zoology at Cork University, but at that time Curator of the Bute Museum, published a paper in the *Glasgow Naturalist*, (volume IX, page 65), dealing with the small mammals of the Western Isles, particularly Bute. This gave much fresh information on the status of some of the smaller mammals and is particularly important. Renouf also dealt with the races. Since then a few casual notes on Bute mammals have appeared, mainly in local natural history journals.

This account of the mammals of the Island of Bute, therefore, is based on my own notes, compiled during nearly forty years' visiting the island, and on what I have been able to discover from a search of the previous literature. To the best of my knowledge I have overlooked no significant published record, but if this is shown to be the case

I apologise in advance, and shall be grateful if any omission is drawn to my attention. There is one important source of unpublished information which has been placed at my disposal. In 1918 the Rev. J. M. McWilliam came to Bute as parish minister. He lived on Bute until the early 1930s, ultimately became Honorary Vice-President of the Buteshire Natural History Society, and continued to visit the island regularly until the second world war. McWilliam, of course, was an ornithologist of considerable distinction who published, amongst other things, a book on the *Birds of the Island of Bute*. He collected considerable notes on the distribution of Bute mammals, and at one time he intended to publish a companion volume to his work on Bute birds. For various reasons this never materialised, and he passed his entire notes on to me some years before he died. I should like to say in the clearest possible terms that this paper on Bute mammals is as much McWilliam's work as my own, and there is no doubt that, had he lived, the paper would have appeared under our joint names.

I am extremely grateful to Miss Catherine Armet, Archivist to the Bute Estates, for doing a great deal of work on my behalf in searching the Bute Estate registers and other historical documents, and my best thanks are also due to the Marquess of Bute for permitting, and encouraging, this research. Over the years I have been particularly grateful to Miss Dorothy N. Marshall and to many individual members of the Buteshire Natural History Society for assistance in many ways.

The island of Bute is separated from the mainland of Argyll by a mere half-mile stretch of water at the Kyles, and the mammal population of Bute appears to differ very little from that of the adjoining mainland. I have no firm evidence, however, that the badger, polecat, pine marten or mountain hare ever occurred on Bute in the wild state, nor is there any historical evidence for the occurrence of the wolf or true wild cat, although all these species are, or were at one time, common in adjacent Argyll. Foxes and red deer now rarely make an appearance, and rabbits were extensively reduced by myxomatosis, but have since staged some sort of recovery. Red squirrels were introduced to Bute in 1872 but have since died out, and there are no grey squirrels. According to official returns no mink are kept on Bute. In view of the interest shown by the Bute family in introducing unusual species to the island in the 1870s, such as the beaver and the kangaroo as well as our own red squirrel, it is a little surprising that no attempt appears to have been made to introduce the fallow deer, white-tailed deer, or Japanese sika deer, all of which were being fairly widely and success-

fully introduced to areas of the mainland adjoining Bute during the latter half of the 19th century.

In the following systematic list the arrangement and nomenclature follows *The Identification of British Mammals* (second edition, 1969) by Dr. G. B. Corbet, published by the British Museum (Natural History), London.

Order INSECTIVORA

HEDGEHOG *Erinaceus europæus* L.

The hedgehog is not listed by John Blain. This may have been an accidental omission or hedgehogs may have been introduced to Bute at a later date, for John Colquhoun in his *Sporting Days* (1866) said that the hedgehog was common on Bute, and it is also recorded by later writers. At present it is common and widely distributed throughout the island, and within recent years there seem to be signs of a definite increase in population. There are no hedgehogs on Inchmarnock.

MOLE *Talpa europæa* L.

Pennant (1777) writes of the mole as "among the isles only in Bute, a praise to its soil". It is also listed by John Blain. It appears to have died out, however, or at least to have undergone a drastic reduction in numbers, for Alston (1880) said that it appeared to be unknown in any of the Scottish islands apart from Mull. Boyd Watt (1905) recognised Pennant's Bute record but said "I do not know that it occurs there now or in any of the other Clyde islands". Commenting on this record Mr. William Evans (*Ann. Scot. Nat. Hist.*, 1905:241) noted that he had in fact caught a mole between Barone Hill and Loch Dhu on 11th January 1895. These records, however, leave us in no doubt that the mole was certainly extremely rare on Bute at that time. From then on it appears to have staged some sort of recovery in population, because Renouf (1919) recorded it and said "Bute possesses both albino and piebald specimens of the mole in addition to the ordinary dark form". Nowadays it is not really uncommon and is widely distributed throughout the island. There are no moles on Inchmarnock.

COMMON SHREW *Sorex araneus* L.

Very common and widely distributed throughout Bute, but absent from Inchmarnock.

PYGMY SHREW *Sorex minutus* L.

Common and widely distributed on both Bute and Inchmarnock.

WATER-SHREW *Neomys fodiens* (Pennant)

Alston (1880) said "it is not rare in Arran, but I have been unable to ascertain its existence in any of the other islands". In 1919 Renouf recorded it from Bute but said "two only". McWilliam caught several specimens in the 1920s and nowadays it is certainly known to be widely, if locally, distributed throughout the island in small

numbers; I have several personal records. It is a shy retiring creature, not often seen by the casual observer, and so apt to be overlooked. I have not yet found it on Inchmarnock, which is not of course to say that it does not occur there.

Order CHIROPTERA

DAUBENTON'S BAT *Myotis daubentoni* (Kuhl)

I have no certain record of Daubenton's bat for Bute, but on many occasions have seen 'water bats' in the early evening over Loch Fad and other stretches of water. From my experience of Daubenton's bat in other parts of the Clyde area I have no personal doubts that these 'water bats' were in fact Daubenton's, but was never able to catch any for identification. Positive information would be greatly welcomed.

PIPISTRELLE *Pipistrellus pipistrellus* (Schreber)

Common and widely distributed throughout Bute. Bats are not uncommonly seen on Inchmarnock and are presumably of this species. I have been in a rowing boat and seen bats passing overhead, flying between Bute and Inchmarnock.

LONG-EARED BAT *Plecotus auritus* (L.)

Fairly common and widely distributed throughout Bute. No definite Inchmarnock records.

Order CARNIVORA

WOLF *Canis lupus* L.

Professor James Ritchie, when commenting in 1915 on the mammalian remains found during the excavations at Dunagoil cave, mentioned that some limb bones of ox, sheep and red deer were found with the ends chewed off. He considered that this pointed "to the presence either of dog or wolf. But the fact that only a small proportion of the available bones were so maltreated indicates that the depredator had only occasional access to the rubbish-heap, a supposition which scarcely tallies with the idea of an ever-present domesticated dog. The chewed bones therefore seem to me to indicate the occasional venture of a prowling wolf to the kitchen midden". (*Transactions Buteshire Natural History Society*, volume VIII, page 55). I can trace no historical evidence of the wolf on Bute, so its extinction must have taken place at a very early date.

FOX *Vulpes vulpes* (L.)

The fox occurred on Bute in ancient times, and an incisor tooth, probably of a fox, was found at the Dunagoil excavations. According to John Blain's *History* the foxes on Bute "had been early exterminated. A few foxes, however, had swummed from Argyllshire across the Kyle, some years prior to 1731, or, according to a traditionary account, were carried in by evil-disposed persons and set at large, where they soon multiplied and became a general pest, which induced the heritors and people of Bute in the year just mentioned to take measures for

rooting them out. The mode they adopted was to contract with one, William Johnston, a fox-killer by profession, to clear the island of those animals within the space of two years at the longest for twenty pounds sterling, besides provision to himself and his dogs, to be provided gratis by the people within whose bounds he might have occasion to hunt whilst he was actually engaged in such public service. Bute has ever since remained clear of this destructive vermin". I am told that a dog fox was shot at the north end of Bute in autumn 1944, and of course it is possible that some might cross the narrow stretch of water at the Kyles, although I would regard this as unlikely. To the best of my knowledge there are no foxes on Bute today.

STOAT *Mustela erminea* L.

Has long been known to occur quite commonly on Bute, and although not mentioned by Blain is probably indigenous to the island. Very few stoats on Bute show any signs of turning white in winter. I have no records from Inchmarnock.

WEASEL *Mustela nivalis* L.

John Colquhoun (*Sporting Days*, page 100) said that the weasel was rare on Bute. This is certainly not the case nowadays when it is fairly common and widely distributed. I have no records from Inchmarnock.

POLECAT *Mustela putorius* L.

John Blain, in his *History*, implies that polecats formerly occurred on Bute, although I can find no other evidence to support his statement that they "had been early exterminated". Boyd Watt (1905) said that there was a report of one being obtained on the island in 1890, but if this was true it was certainly not a native. There are certainly no polecats on Bute today, but FERRETS *Mustela putorius furo* L., escape all the time, and I have recent evidence of feral breeding.

BADGER *Meles meles* (L.)

The statement in Blain's *History* that the badger "had been early exterminated" does imply that badgers occurred on Bute at one time, although I have been unable to find any confirmatory evidence. Badgers are not uncommon on the adjacent Argyll mainland.

OTTER *Lutra lutra* (L.)

Long known to be fairly common around the shore, and inland at suitable rivers and lochs. I am glad to say that otters do not seem to be much persecuted nowadays. There are many records from Inchmarnock and the Burnt Islands.

WILD CAT *Felis silvestris* Schreber

Alston (1880), when commenting on Pennant's statement that the wild cat was a native of Arran, said that there "appears to be no evidence that the wild cat was ever found in any of the islands". Ritchie pointed out, however, that unmistakable bones of the wild cat

were found during the excavations at Dunagoil cave (*Transactions Buteshire Natural History Society*, volume VIII pages 51-52) and said that in view of the Dunagoil discovery Alston's statement probably required revision. The remains examined by Ritchie, however, indicated a race of wild cats much larger than the native race of Scotland today, so presumably the wild cat became extinct on Bute in very ancient times. Domestic cats gone feral are common all over the island and sometimes grow to considerable size; there are a few on Inchmarnock.

Order PINNIPEDIA

GREY SEAL *Halichoerus grypus* (Fabricus)

Boyd Watt (1902) records that when Mr Alexander Gray, Curator of the Millport Marine Biological Station, was dredging off the Little Cumbrae on 8th September 1900 a grey seal rose leisurely to the surface within thirty yards of his boat. A good view was obtained of it and it was seen three times altogether. This record is just on the fringe of our area. I saw two grey seals in the sea south of Garroch Head in early May 1967. I got a very clear view at close range of the typical head silhouette and widely separated nostrils, and there is no doubt about the identification. This is, in fact, the only recent record known to me, although there may well be others not reported, and further information would be welcomed.

COMMON SEAL *Phoca vitulina* L.

Fairly commonly seen around the Bute shores at all seasons of the year. It is well known around Inchmarnock, and pups have occasionally been seen there.

WALRUS *Odobenus rosmarus* (L.)

In the *Glasgow Naturalist* for 1949 (volume XV, page 104) Sir John Graham Kerr, Regius Professor of Zoology at the University of Glasgow, recorded that on August 8th 1884 he saw a single specimen of the walrus in Ettrick Bay. He gave a good description and had no doubt as to the authenticity of the record, which is the only one for the Clyde area and one of the few for Scotland.

Order ARTIODACTYLA

WILD BOAR *Sus scrofa* L.

The only evidence I can find for the occurrence of the wild boar on Bute comes from the excavations at Dunagoil cave (*Transactions Buteshire Natural History Society*, volume VIII, pages 52-53). "Seven bones tell of the presence of at least three individuals of this species. The bones included the right half of a cranium or brain-box, part of an upper jaw with much worn molar teeth, a shoulder blade (scapula), part of a pelvic girdle and of a vertebra, and a limb bone (fibula), probably of an embryonic individual. The presence of human agency is exhibited by several blow incisions on a fragment of a left lower jaw bearing molar teeth scarcely worn". The wild boar has long

been extinct on Bute, although it probably existed in parts of the mainland of Scotland until the 13th century.

RED DEER *Cervus elaphus* L.

During the excavations at Dunagoil cave (*Transactions Buteshire Natural History Society*, volume VIII, page 53), bones of the red deer were found which indicated that red deer of a size much greater than those seen in Scotland today formerly inhabited Bute. This race clearly became extinct in ancient times, and there is certainly no mention of the red deer in Blain's *History*. Neither Alston (1880) nor Boyd Watt (1905) make any mention of red deer on Bute, but a few were certainly present and breeding on the island in the early years of this century, just before the first world war. I have been unable to trace any record of deliberate introduction, so they may have re-established themselves naturally by coming across from the mainland. As far as I know no red deer has been shot on the island since 1915. Whitehead (*Deer of Great Britain and Ireland*, 1964) says that "Apart from an odd visitor which swims there from either Arran (six miles distant) or from the mainland (a bare half mile away) there are none now resident". Single specimens are very occasionally reported as having been seen in the north part of the island, and these have presumably come across the Kyles from the mainland.

ROE-DEER *Capreolus capreolus* (L.)

That roe-deer existed on Bute in ancient times is clear from the evidence of the excavations at Dunagoil cave. They long ago became extinct, however, and are not recorded by the old writers such as Pennant or Walker, or by John Blain in his *History of Bute*. Roe-deer probably returned to Bute about the middle of the 19th century, and John Colquhoun in his *Sporting Days* (1866) says that he shot a pair in 1865, and speaks of roe-deer as being far more numerous in south Bute than in the northern division of the island, a situation that continues at the present day. Professor Ritchie (*Scottish Naturalist*, 1918, page 212) states "The roe-deer now in Bute bear no close relationship to those of the early island fauna, but are recent immigrants to the island, which owe their presence to the deliberate introduction of man, or have been induced by his new plantations to venture across the Kyles". The population of roe-deer on Bute varies between about 100 and 150 beasts, and during the 1950s, at least, between thirty and forty were killed every year in order to reduce to a minimum any possible damage to the young plantations.

URUS *Bos primigenius* Bojanus

There is one early record of the extinct urus or great fossil ox from Bute. In the *Catalogue of the Western Scottish Fossils* by Armstrong, Young and Robertson (Glasgow, 1876) page 152, it is recorded that *Bos primigenius* has been found "in clay, Rothesay Bay (Professor Geikie)". Professor James Ritchie discusses two further

records of the urus in a paper in the *Transactions of the Buteshire Natural History Society*, volume III, 1910, pages 67-68. Since this paper may not be readily accessible it is worth quoting extensively. In discussing the identity of bones found by Mr. Gilmour in the clay pit at Kilchattan Tile Work in November 1909, Professor Ritchie concludes "that they are the remains of one of the varieties of the extinct wild form of *Bos taurus*, L. The fragmentary evidence renders impossible a definite conclusion as to which of the two extinct varieties the bones belonged — the Great Fossil Ox (var. *primigenius*), or the Long-fronted or Small Fossil Ox (var. *longifrons*); but the dimensions of the remains suggest the former".

"It is a matter of great interest to record that about twelve years ago Mr. Gilmour, excavating in the same locality, brought to light what he considered to be a complete skeleton of an Ox. Unfortunately, no portions of the skeleton have been preserved, for although the skull was retained for some time by Mr. Gilmour, it has now been lost sight of, and the other bones crumbled away soon after they were exposed to the atmosphere. In the recollection of the excavator the hoofs of this skeleton were larger than those of our present cattle, while the skull was large and massive, and resembled that of *Bos primigenius* figured by Owen in 'British Fossil Mammals and Birds', page 498. I have little doubt that this unrecorded and now dissipated skeleton was a fine example of the Great Fossil Ox".

CELTIC SHORTHORN *Bos longifrons* Owen

Bones of the Celtic shorthorn or smaller fossil ox found during the excavations at Dunagoil cave were according to Professor Ritchie "far too numerous to record in detail". Full details are given in *Transactions of the Buteshire Natural History Society*, volume VIII, pages 53-54. Remains of the Celtic shorthorn have been found all over Scotland, and although it has long been extinct its blood may still exist in some of the domestic races of our short-horned cattle.

WILD GOAT *Capra hircus* L.

There have long been two small and quite distinct herds of wild goats on Bute. One at the north end and a smaller one right at the south of the island. Their fortunes have fluctuated widely over the years, but at present the population of the north herd is about thirty beasts. The following excerpt from a letter by Mr. Alexander Smart (*Scotsman*, 15th January 1932) is well worth quoting. "... it may interest readers to know that we have two separate herds on the island of Bute. The herd on the south end near Garroch Head is reduced meantime, but the other herd which runs on the extreme north end numbers over forty adult goats. The latter herd has been in existence for many years, and some fine heads have been got. In recent years I shot one which carried horns measuring 44½ in. in length, and 8½ in. in girth at the base. This may be a record head for Scotland. These goats are not in any way

to be considered tame, as they can prove if you try to corner them. From the Kyles of Bute steamers they can be seen with the naked eye in clear weather. The goat with the large head was known to be over twenty years old, and was a magnificent animal." This horn length quoted is simply astonishing, and represents nearly twice the average length of sizeable horns from other parts of the country.

TURBARY SHEEP *Ovis palustris* (Ratmeyer)

Many relics of this early sheep were found in the excavations at Dunagoil cave. Professor Ritchie writes "Remains of turbary sheep have been found in neolithic settlements, in lake dwellings in this country and on the Continent, and even in Roman Stations in Scotland. They may have been related to the fine-wooled straight-horned sheep which were domesticated on the mainland and islands of Scotland, and have still outposts in the Hebrides, but at any rate they have long been extinct from Bute and the neighbouring areas" (*Transactions of the Buteshire Natural History Society*, volume VIII, pages 54-55).

Order LAGOMORPHA

HARE *Lepus capensis* L.

Alston (1880) considered that the hare "does not appear to be indigenous to any of the Islands, but has been very generally introduced". It was certainly on Bute in Pennant's time (1772), the *Old Statistical Account* (1790) said that hares were 'in plenty', and it is noted as common by many subsequent writers. At present it is common and widely distributed. After myxomatosis and the fall in rabbit population it underwent the usual increase, but the numbers now seem to be stabilised. I have no records of hares from Inchmarnock.

MOUNTAIN HARE *Lepus timidus* L.

There are no mountain hares on Bute at present and to the best of my knowledge there never have been. Professor James Ritchie in his *Animal Life in Scotland* (1920) marks the mountain hare as indigenous to north Bute on his map on page 282. This appears to have been an error. There is certainly no confirmation in the accompanying text, and I can find no other writers who refer to mountain hares on Bute. (Ritchie also marks the mountain hare as having been introduced to Arran, which is certainly an error).

RABBIT *Oryctolagus cuniculus* (L.)

Rabbits were introduced to Bute in the early part of the 19th century. The exact date is uncertain, but it appears to have been round about the 1830s, a date common to many places in the Clyde area. The rabbit was certainly not mentioned by John Blain in his *History* of 1820. They did exceedingly well and soon became abundant and widely distributed. Myxomatosis reached Bute in early 1954 and the rabbit was very nearly exterminated. They did not quite die out, however, as was suggested in the *Third Statistical Account*

(1960), for there are still several small local populations and, as with other areas, sporadic local outbreaks of myxomatosis seem to keep the population under control. Rabbits are common on Inchmarnock.

Order RODENTIA

RED SQUIRREL *Sciurus vulgaris* L.

The red squirrel is not indigenous to any of the Clyde islands. Some were introduced to Bute in 1872 (Ritchie, *Animal Life in Scotland*, page 282); they did well for a number of years but eventually died out. The Rev. J. M. McWilliam saw an occasional one just after the first world war, but there appears to be no record after 1920.

BEAVER *Castor fiber* L.

In 1874 a small colony of beavers was established at Mount Stuart by the then Marquess of Bute. The animals bred successfully for many years but by 1890 the colony had died out for no apparent reason. One beaver found dead and shown to the Zoological Society of Glasgow in 1890 was supposed to be the last. J. Stewart Black, Head Keeper to the Marquess of Bute at that time, published a very detailed account of the Bute beaver colony in the *Journal of Forestry and Estates Management* for 1887. This was later reprinted in pamphlet form by A. Westwood & Son, Cupar, Fife. McWilliam recalls that when he went to live on the island in 1918 some remains of the beaver dams could actually still be seen—a tribute to the soundness of their building construction.

WOOD-MOUSE *Apodemus sylvaticus* (L.)

Common and widely distributed all over Bute, but apparently absent from Inchmarnock.

HOUSE-MOUSE *Mus musculus* L.

Common near habitation, but also fairly widely distributed throughout the less populous parts of the island. The house-mouse is fairly common around the farms on Inchmarnock to where it was accidentally introduced some years ago.

BLACK RAT *Rattus rattus* (L.)

The only record of the black rat on Bute that I can trace is in Blain's *History of Bute* (1820) where he lists both "Muscovy and black rat". This is slender, but possibly accurate, evidence.

BROWN RAT *Rattus norvegicus* (Berkenhout)

The brown rat appears to have found its way to Bute in the early years of the 18th century, and is now only too common and widely distributed. There are brown rats on the Burnt Islands and there used to be some on Inchmarnock, but for the time being at least it appears to have been exterminated there.

BANK VOLE *Clethrionomys glareolus* (Schreber)

Now known to be fairly common and widely distributed

throughout the island. This species was little recognised until the early years of this century, and the first record for Bute appears to have been some specimens collected for the British Museum (Natural History) and published by G. E. H. Barrett-Hamilton in his *History of British Mammals* in 1914. The bank vole was well known to McWilliam in the 1920s. I have no record of any voles from Inchmarnock.

WATER-VOLE *Arvicola terrestris* (L.)

This large dark vole is locally not uncommon in suitable places on Bute. The first zoologist to record it appears to have been Renouf in 1919. Alston and Boyd Watt had no positive evidence of its occurrence on the Clyde islands. This is a little odd, because it is certainly perfectly common on Bute nowadays, and presumably was always so. It seems to be quite clearly absent from Inchmarnock.

FIELD-VOLE *Microtus agrestis* (L.)

The field-vole or short-tailed vole is widely distributed and very common on Bute, at times reaching nearly plague proportions. There is no evidence that it ever occurred on Inchmarnock, and it is certainly not there nowadays.

Order CETACEA

'Whales' and 'dolphins' are not infrequently seen off the shores of Bute, and are fairly regularly reported by fishing vessels from more off-shore waters, mainly the Sound of Bute, the upper part of Kilbrannan Sound, and lower Loch Fyne, all of which are just on the fringe of our area. It is seldom possible, however, to make a correct identification from these reported sightings, and true strandings have been very few, so the only species about which I can give any reasonably definite information are as undernoted. The porpoise, of course, is common at all times, and the white-beaked dolphin, bottle-nosed whale and killer whale are now sufficiently well known to make the giving of individual records unnecessary.

COMMON RORQUAL *Balaenoptera physalus* (L.)

Reported from Loch Fyne and the Kilbrannan Sound in the *New Statistical Account* (1843) and by Dr. John Walker in his *Essays* (1808), where he states that this whale frequents the area every year during the herring season. Alexander Gray, Curator of the Marine Biological Station at Millport, recorded that about the year 1889 the Kilbrannan Sound was frequented by a whale 50 to 60 feet long, followed by two calves. All three became well known to the local fishermen, and were often seen by Mr. Gray, who thought they were almost certainly common rorquals. At best these are tenuous records, and on the fringe of our area.

LESSER RORQUAL *Balaenoptera acutorostrata* (Lacepede)

On 7th August 1897 the small steam whaler "Thrasher",

belonging to the Cape Fisheries Company, Ltd., while on her trials in the Firth of Clyde, harpooned and killed a whale about one mile west of Largs, i.e. between Largs and Bute. The carcass was towed to Messrs. Caird and Co.'s shipbuilding yard, Greenock, and in an advertisement offering it for sale at £5 it was said to be thirty feet long. The lips found their way to Paisley Museum where they were seen by Hugh Boyd Watt, who was also given a photograph of them by Mr. J. M. B. Taylor, the Curator (*Ann. Scot. Nat. Hist.*, 1899, page 236). Hugh Boyd Watt formed the opinion that the whale was a lesser rorqual, and this was confirmed by Mr. Oldfield Thomas of the British Museum (Natural History), to whom the photograph was sent.

BOTTLE-NOSED WHALE *Hyperoodon ampullatus* (Forster)

Regularly reported from the Sound of Bute and more off-shore waters. References to the regular occurrence of this species go back well over a century. I myself have seen many off the shores of Bute and Inchmarnock.

PORPOISE *Phocoena phocoena* (L.)

Commonly seen in the surrounding seas at all seasons of the year. Specimens have been stranded at St. Ninian's Bay on 16th August 1922, and at Inchmarnock on 20th May 1948. There are other 'possible' strandings, not fully reported.

COMMON DOLPHIN *Delphinus delphis* L.

This is an uncommon species for the Clyde. Mr F. Gordon Pearcey, naturalist to the Scottish Fishery Board, informed Boyd Watt that he saw a large school of what he took to be common dolphins between Ardlamont and Skipness Point on 14th September 1898 (*Ann. Scot. Nat. Hist.*, 1900, page 245). This record is unlikely to be correct. Hugh Boyd Watt (1900) discusses a skull in Rothesay Museum labelled "Porpoise, from Mr. A. McKirdy", which he believed to be that of a common dolphin, as the skull was about 24 inches in length and had about 190 teeth. It was certainly not the skull of a porpoise.

EUPHROSYNÉ DOLPHIN *Stenella styx* (Gray)

The possibility that the skull in the Rothesay Museum, mentioned above, might have been that of a Euphrosyne dolphin does not appear to have been considered by Hugh Boyd Watt. The skulls of the Euphrosyne and common dolphins are very similar and the difference consists mainly of the grooves present on the palate of the common dolphin. I remember seeing this skull in the Museum just before the second world war, but had no opportunity to examine it, and when I went back to see it in 1947 it had apparently been disposed of, and its whereabouts were not known. Further information would be very welcome, although it would appear from Hugh Boyd Watt's note that no locality was given on the skull. Reference should

also be made to a considerable discussion in the *Annals of Scottish Natural History*, 1900, pages 68 and 245, and 1901, pages 3-4 about skulls of this genus in the Hunterian Museum at Glasgow University.

BOTTLE-NOSED DOLPHIN *Tursiops truncatus* (Montagu)

The *New Statistical Account*, volume VII, 1845, page 439, states that the "Great Dolphin (*Delphinus tursio*), from 12 to 15 feet in length, and with a pointed muzzle or beak, frequents the coast of Saddell and Skipness during the herring-fishing season". This reference to the bottle-nosed dolphin from the fringe of our area is extremely inconclusive and is unlikely to be correct.

WHITE-BEAKED DOLPHIN *Lagenorhynchus albirostris* Gray

After the porpoise, this is the commonest cetacean in Clyde waters and can frequently be seen jumping in the seas surrounding Bute. There are many published records. I have seen white-beaked dolphins in the narrow straight between Bute and Inchmarnock. One was found stranded on the beach near St. Ninian's Bay by Mr. John Robertson in November 1899 (*Ann. Scot. Nat. Hist.*, 1900, page 245).

KILLER WHALE *Orcinus orca* (L.)

The killer whale is well known in the Firth of Clyde and is frequently seen in the Sound of Bute, Kilbrannan Sound and Loch Fyne. Records of killer whales in Clyde waters go back over a hundred years, although popular and local names given to the killer by fishermen have often led to confusion. Mr. John Paterson and Mr. John Robertson saw two killers about a mile west of Ettrick Bay on 5th June 1898 (*Ann. Scot. Nat. Hist.*, 1898, pages 236-237), possibly the earliest Bute record to be made by competent naturalists. I myself have seen killers south of Garroch Head and west of Inchmarnock on many occasions.

KANGAROO *Macropus* sp.

No account of the mammals of the Island of Bute can be considered complete without giving a summary of the interesting experiment conducted by the Marquess of Bute in introducing kangaroos to Mount Stuart in the latter part of the 19th century. I am extremely grateful to Miss Catherine Armet, Archivist to the Bute Estate, for doing a great deal of work on my behalf in searching the Bute Estate files and other Bute family historical documents for early information about the kangaroo colony, and to the present Lord

Bute for kindly giving permission for this information to be published.

According to the earliest written evidence at present available, in 1884 Lord Bute's Factor, Mr J. Windsor Stuart, was negotiating with Mr Charles Jamrach, a Natural History dealer in London, for kangaroos to add to the Bute colony, which by that date had clearly been in existence for some time.

Miss Armet, however, has discovered that at Dumfries House there are twelve paintings of views of Mount Stuart and its policies by Nicolas Chevalier (1828-1902) dated 1875 and 1877 or 1878, and in at least one of these paintings a kangaroo or wallaby is included. This would indicate that the kangaroos had been introduced in the early 1870s, about the same time as the beavers and the red squirrels, which seems quite reasonable.

Several species seem to have been introduced, those most frequently mentioned in the records being Bennett's wallaby, rock wallaby, and red kangaroo, and considerable breeding success was obtained. The colony was of considerable interest to the naturalists of that time and there are several references to the kangaroos in local natural history journals. The latest I can find appears in the *Annals of the Andersonian Naturalists' Society*, volume III, 1908, page 73, by Mr. John Robertson, who describes a visit on 7th April 1890 when members visited both the wallaby enclosure and the beaver colony; one wallaby was carrying a young one in her pouch. Mr. William Evans, who visited Bute in December and January 1894-95, says "the kangaroos imported some years ago by the Marquess of Bute seem to thrive wonderfully well in their enclosure in the woods at Mount Stuart, where I saw them under rather novel conditions, namely when there was snow on the ground" (*Ann. Scot. Nat. Hist.*, 1895, page 137).

It is difficult to establish when the kangaroo colony came to an end, but the present evidence would indicate the early part of this century. R. Angus Downie, in his little book *Bute and the Cumbræes*, published in 1934, states "... after being kept in an enclosure for some time, were turned out to fend for themselves. One lived upon its own resources for about three years". It is difficult to know what to make of this statement, but Mr. R. A. Milligan, Bute Estate Factor, who has also made some enquiries on my behalf, tells me that he understands some kangaroos were allowed to roam on Bute, with the result that they ate crops and consequently the farm tenants took care to ensure their life was short! So far I have been unable to discover whether any breeding took place in the true wild state, but I would regard this as unlikely.

At some future date it may be possible to publish a fully detailed account of this interesting experiment.

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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, 169-177), 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