

SEALS IN LOCH NESS

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ABSTRACT

A Common or Harbour Seal *Phoca vitulina* L. lived in Loch Ness, Scotland, for seven months from November 1984–June 1985. Photographs of the seal are presented. This is the first time a seal has been proven in Loch Ness. Fishermen's reports indicate that Loch Ness is visited by a seal approximately once every two years.

INTRODUCTION

Loch Ness is one of Britain's largest and deepest freshwater lakes. It is long, narrow, deep and straight 38 km long, 1.7 km wide and 230 m deep, is 16 m above sea level and is connected to the sea by the 12-km-long River Ness. It lies in the valley of a former glacier. Many salmon *Salmo salar* L. migrate through Loch Ness. The temperature of Loch Ness surface water ranges 4–12°C (Wedderburn, 1907). The ecology of Loch Ness is described by Maitland (1981).

Common or Harbour Seals *Phoca vitulina* L. have a well-known habit of exploring up rivers and in northern Canada permanent populations of Common Seals live in freshwater lakes 300 km inland from the sea (Mansfield, 1967; Hewer, 1974; King, 1983). About 100 seals, both Common Seals and Grey Seals *Halichoerus grypus* Fabricius, live in the sea near Inverness. Individual seals of both species can regularly be seen 1 km up the River Ness in the middle of Inverness town, especially at high tides. There have been several reports of a seal in Loch Ness (Anon, 1933; 1934; 1934) and beyond Loch Ness in the River Oich (Harvie-Brown and Buckley, 1895, p183), but these reports were not supported by photographs and were not believed.

OBSERVATIONS AND DISCUSSION

Between November 16, 1984 and June 11, 1985, a seal was seen in Loch Ness by myself and other people. Photographs were taken (Figs 1 and 2). The seal was identified as a Common or Harbour Seal *Phoca vitulina* by its head profile, with turned-up nose by its grey colour with black spots and by its estimated length of 1.8m. The other species of seal found around Scotland, the Grey Seal, has a long straight nose, like an Alsatian dog.

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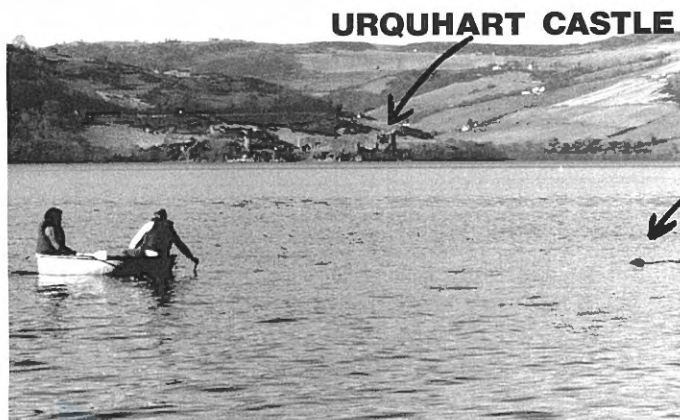


Fig. 1. Seal in Loch Ness with Urquhart Castle. February 27, 1985.

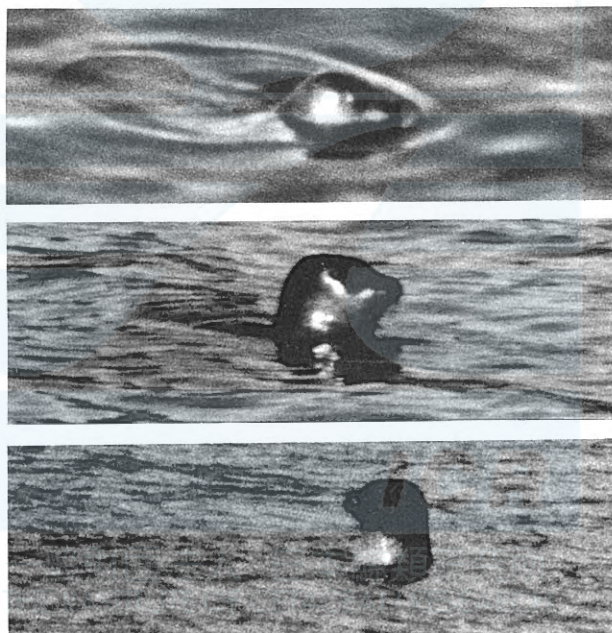


Fig. 2. Common Seal in Loch Ness. February 27, 1985.

Above: seal in natural swimming position.

Centre and below: seal with head raised in response to a low whistle sound made by me.

The seal spent most of its seven months living on the south side of Loch Ness opposite Urquhart Castle (Fig. 3). However, the seal was seen in many parts of Loch Ness, including Fort Augustus 48 km from the sea. The seal was seen in the river exit of Loch Ness at Lochend on four separate occasions (Dec. 1, Dec. 21, Jan. 13, Feb. 8) yet it did not descend the river to the sea.

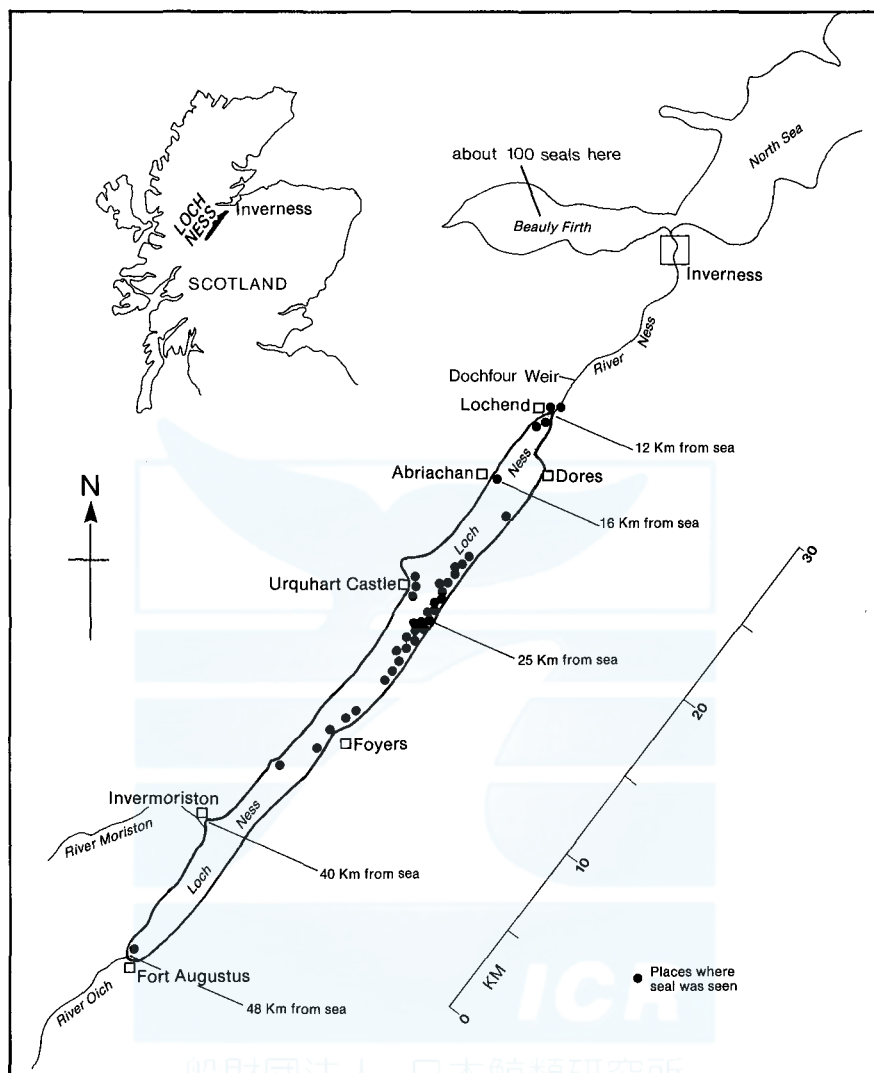


Fig. 3. Loch Ness showing places where the seal was seen.

This suggests that the seal “knew” where it was, was not “lost”, and that it deliberately remained in Loch Ness. The seal appeared to be in vigorous good health throughout its stay in Loch Ness. The seal was shot on June 11, 1985.

About 30 people reported about 60 separate sightings of the seal to me. Of these 30 observers, twenty-eight were local people who had close contact with the surface of Loch Ness – either fishermen in salmon-trolling boats or people who lived beside Loch Ness. Of the hundreds of thousands of people, locals and visitors, who drove along the roads beside Loch Ness during the 7-month period, only two (that I know of) – a pair of Australian tourists at



Fig. 4. Seal making successive jumps, as seen by fisherman Mr Gerry Breau.

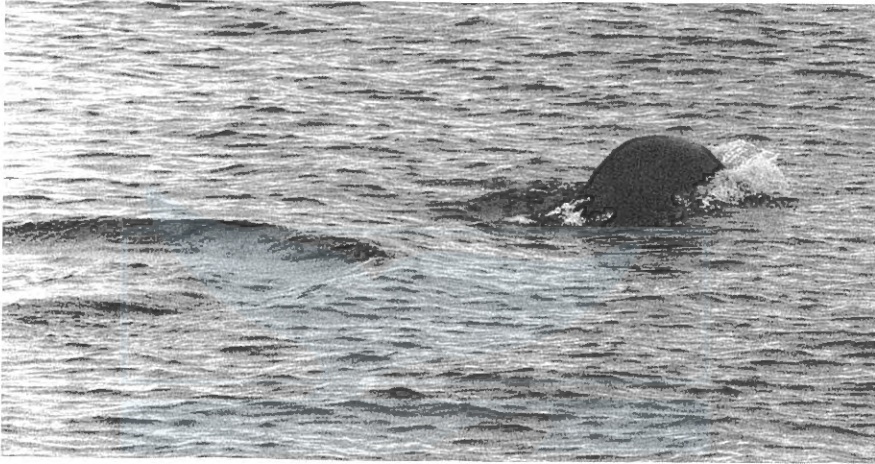


Fig. 5. A Common Seal jumping in sea near Orkney Islands. Photograph by Paul Thompson.

Urquhart Castle – noticed the seal. Common Seals spend only about 20% of the time at the surface, and make dives of 3–8 minutes duration (P. Thompson, pers. commn). Conclusion: in Loch Ness it is very hard to notice such a small animal as a seal unless you spend many hours close to the water. While at the surface, the seal breathed in and out about 24 times per minute (measured by observing the rise and fall of its back when the seal was floating horizontally).

The seal often followed the boats of salmon fishermen who troll along the sides of the Loch, often following a boat for half an hour, to the annoyance of the fishermen. One day fisherman Mr Gerry Breau accelerated his boat to try to get away from the seal, and the seal chased after the boat at top speed, leaping out of and into the water ten successive jumps like a porpoise (Fig. 4). However, this behaviour was only seen on one occasion.

Fishermen and river bailiffs informed me of the following sightings of seals in Loch Ness during recent years:

1972–80: About 4 seals seen in various parts of the Loch, including 2 together at mouth of River Moriston.

1981 April–August: 1 seal seen at mouth of River Moriston.

1984 November–June 1985: 1 seal seen in many parts of Loch (this report).



Fig. 6. Distribution of seals in Scottish lochs, probably *Phoca vitulina*.

1985 October: An adult and a 4-month-old young Common Seal seen together at Dochfour Weir and near Foyers (identified from photographs taken by Mr John Bailey).

This totals about 8 seals in 15 years (1972–86): an average of one seal entering Loch Ness every two years. Two seals together were seen on two occasions. The number of seals reported by individual fishermen varied greatly: one man had seen six seals during the period, some men have never seen a seal yet.

Seals in Loch Ness lived in good health and the place at which seals were most commonly seen was the mouth of the River Moriston (Fig. 3), although the present seal was not seen there. Seals lived in Loch Ness for up to seven months. What finally happens to seals that enter Loch Ness? Local men told me that several seals have been shot by salmon fishermen. One rainy January day some years ago when the River Ness was in spate, a big seal was seen swimming down the River Ness at Dochgarroch near Dochfour. It seems that most seals that enter Loch Ness get shot, but a few return to the sea.

A seal making successive jumps, especially if seen silhouetted against the setting sun, etc. could well look like a many-humped serpent or monster (Figs 4–5). Perhaps a proportion of sightings of the “Loch Ness Monster” and other “sea-serpents” may be sightings of jumping seals. A successive-jumping

seal looks more like a "sea-serpent" than a dolphin: a seal jumps equal-length jumps in fast close-spaced rhythm; whereas a dolphin jumps regularly and the jumps are spaced further apart.

The distribution of seals in the larger Scottish lochs is shown in Fig. 6 and was discovered by interviewing fishermen and river bailiffs etc. In near-to-the-coast Loch Shiel, Hope and Maree, seals are seen as follows:

L. Shiel : one or two seals seen most years, may stay several months, once five seals seen together.

L. Hope : one seal six weeks in loch June–July 1983, one definite Grey Seal one month in loch August 1984.

L. Maree: one seal seen 1981, five seals seen Sept–Oct 1983.

In lochs which have hydroelectric dams blocking their outlet river, such as Lochs Morar, Lochy and Awe, seals are not seen. In former times in Loch Awe, however, when the outlet river flowed freely to the sea, seals were seen: "The seal comes up from the ocean, through a very rapid river, into Loch Awe in quest for salmon, and retires to the sea at the approach of winter". (Anon, 1793, p260). "For ten years, up to 1883, we saw one or more seals in Loch Awe almost every year, most frequently in the Autumn, but also in April in some years". (Harvie-Brown, 1891). In Loch Lomond, which is near the sea and whose river is unobstructed, seals have not been reported (P.S. Maitland pers. comm): perhaps the industrial pollution in the Firth of Clyde during the past century is the cause.

The former occurrence of seals in Loch Awe is interesting for it proves that seals can ascend rivers at least four times steeper than the R. Ness (slope of R. Awe 5.1m/km, R. Ness 1.3m/km). (Fig. 6).

In rivers on the east coast, the furthest upstream places and distances above tidewater at which individual seals have been seen are:

R. Spey : Aberlour 27 km

R. Deveron: Bridge of Marnoch 30 km

R. Ythan : Fyvie 37 km (A young Common Seal was photographed Nov. 30, 1984).

R. Don : Grandholme Works 2 km (Industrial pollution and weirs in river).

R. Dee : Park Inn Pool, Drumoak 19 km

R. Tay : Caputh 24 km.

CONCLUSION

The data presented prove that a Common or Harbour Seal lived in Loch Ness during seven months of 1984–85, indicate that Loch Ness is entered by a seal about once every two years, and prove that a seal can live for many months in Loch Ness. The route of entry of a seal must be from the sea up the River Ness. These data suggest that past reports of seals in Loch Ness were true and that seals have probably been visiting Loch Ness for thousands of years.

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