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Mirages on Loch Ness

A KIND of mirage is one of the most familiar phenomena on Loch Ness, especially in winter and spring. It is best seen in the morning. Distant objects, such as the steamers plying on the lake, appear as though raised above the surface and floating in the air.

The most constant feature of the Loch Ness mirages is seen at promontories some miles distant. The shore-line at the promontories, though really nearly parallel with the horizon, is caused by the mirage to appear to form an angle with the horizon. When this angle is great (say 60° or more), the promontories appear like overhanging cliffs. When the angle is very acute, they seem to be suspended over the horizon. Objects which are known to be below the horizon are brought into view. The receding steamer, after sailing out of sight, will reappear miles further away, raised high above the loch and looking very large. The promontory at Dores appears as a conspicuous island in the middle of the loch. The fathers in the Benedictine Monastery at Fort Augustus tell that on one occasion a snow-covered mountain appeared over the end of the loch. These phenomena are best marked at a distance of several miles from the observer. The steamer, sailing away from the observer, seemed, at the distance of a mile or more, to leave the surface of the loch and sail up into the air.

Signs of the mirage were sometimes to be distinguished at lesser distances. Standing on the deck of the Lake Survey yacht *Rhoda*, when the eyes would be 7 or 8 feet above the water, there could often be seen on the rocks of the nearest parts of the shore a conspicuous horizontal line, looking just like a high-water mark. In the reports of the Balatonsee Commission, mirages of a similar nature are discussed. Von Chelnoky explains how they arise through the formation of a lower stratum of warmer air, heated from the lake. In shallow lakes like Lake Balaton, the mirage is essentially a summer phenomenon. The lake remains warm during the night when the air cools.

In Loch Ness the converse is the case. The great body of water maintains a moderate temperature throughout the year. In summer the lake rarely attains to 60°F , and so the air may frequently remain as warm as the lake, though mirages may occur after any cold night. In winter the lake maintains a high temperature, rarely falling below 42°F or 43°F , and thus the air will fall to a much lower temperature almost every night, and a well-marked layer of warmer air be formed by morning over the surface of the lake, giving rise to the mirage.