

On the Occurrence of considerable Deposits of Limonite (Bog Iron Ore) in North-west Ross-shire.

By W. IVISON MACADAM, F.I.C., F.C.S., Professor of Chemistry,
New Veterinary College, Edinburgh.

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DURING the course of an inquiry into the nature and extent of the less known iron ore deposits of Scotland undertaken in connection with a paper to be communicated to the Society of Antiquaries of Scotland during the Winter Session 1886-87, I have been led to consider certain masses of Bog Iron Ore which are distributed somewhat widely over the less cultivated portions of the country. The present communication deals only with the north-westerly portion of Ross-shire, and most of the localities are within the parish of Gairloch.

1. *Cove*.—A small township some seven miles north-west of Poolewe. The deposit is not of great extent, and now occupies a raised position, the harder iron oxide having resisted the action of the elements more successfully than the loose sandy soil by which it was surrounded.

2. *Inverasdale*.—A township about four miles north-west of Poolewe. The locality contains very considerable deposits of the mineral. During the short stay we made four somewhat large "pans" were discovered, and from the fact that masses of the substance were found used as building stones in the drystone dykes in the neighbourhood there are doubtless many more deposits in the locality. At the time of my visit the crofters' patches were under oats, which hindered proper investigation. The principal deposit was found directly opposite the schoolhouse, and two others to the seaward of the same building, with a less deposit to the south of the school.

3. *Laid School*.—On the road, in a cutting directly above Laid School, a small deposit of poor ore occurs.

4. *Laid Churchyard*.—Loch Gruinard. The deposit occurs on ground now enclosed as a cemetery. The extreme hardness of the mass has saved it from being broken up. The deposit is about six inches thick and covers a considerable area.

5. *North Erradale*.—About six miles north-west of Gairloch village and half-a-mile from the sea. The deposit is not great.

6. *Little Sand*.—On the shore of the Gairloch, and about $3\frac{1}{2}$ miles

north-west of the village of Gairloch. The deposit is about 50 feet above the shore line.

7. *Lonmor*.—About a mile and a half nearer Gairloch village than the preceding deposit. The substance is about 150 feet above sea-level.

8. *Strath of Gairloch*.—About 2 miles north of Gairloch village, and about 150 feet above sea-level.

9. *South Erradale*.—This township lies to the south-west of Gairloch. It occupies a flat strath formed by the Abhuin Ruadh or "red burn." The extent of this deposit is enormous, covering acres of land. It averages from 9 to 18 inches thick, and has been utilised by the inhabitants for building the walls forming the boundaries of the township. One large "dyke" is called the "iron dyke," and is wholly composed of the Bog Ore. There must be some hundreds of yards of these "iron dykes." The material is still being formed, and the locality is certainly one of the most rich in the country for this particular iron ore.

10. *Point of Gairloch*, or the "Red Point." About 3 miles further south than the preceding a deposit has been found of considerable depth and extent.

Several of the samples taken from these localities have been tested for iron, and the results obtained are as follows:—

Bog Iron Ores from Gairloch Parish, North-west Ross-shire.

		<i>Ferric Oxide.</i>	<i>Equal to Metallic Iron.</i>	<i>Silica.</i>
1. Cove	...	(a) 72·54	50·77	3·56
		(b) 5·48	3·83	85·92
5. North Erradale		(a) 69·84	48·88	2·61
		(b) 55·42	38·79	12·64
6. Little Sand...		73·68	51·57	4·72
7. Lonmor	...	73·16	51·21	3·84
8. Strath of Gairloch		30·48	21·33	60·56
9. South Erradale	(a)	70·88	49·61	7·48
	(b)	66·68	46·67	8·24
10. Point Gairloch	(a)	71·04	49·72	10·61
	(b)	20·81	14·58	61·08