the boll. He has had of oats, before liming and manuring, from 10 to 11, after liming and manuring, from 12 to 13 quarters per acre ; and of wheat from 6 to 7 quarters per acre. He commenced liming in 1829 and manuring in 1835, the rotation, up to that period, being potatoes, and wheat, or oats, alternately. In 1833, Sir John Richardson reclaimed 18 acres more at an expense of L.1200; and, by means of head-dikes, break-waters, and other contrivances, which he is from time to time throwing out into the river, for the purpose of accommodating silt, upwards of 150 acres more may ultimately be added to the parish ; of these, from 15 to 20 may be banked off in the course of two years.”

From a table already given, under the head of Superficial Extent, we have already found that the fresh water lakes in Scotland occupy an area of 638 square miles, or cover an aggregate extent of 408,320 English statute acres. The only counties that are devoid of lakes are those of Berwick, Clackmannan, the Lothians, and Peebles ; whilst those of Roxburgh amount to only 320 English acres. The great­est extent of lakes are in Inverness-shire, (84,480 English acres,) Argyleshire, exclusive of islands, (38,400,) Ross- shire, (38,400,) Perthshire, (32,000,) and Sutherlandshire, (30,080.) The lakes, generally speaking, occupy the valleys or ravines amongst the mountains, and are thus distinguish­ed for their length, their breadth being comparatively trifling. The only Lowland lakes worth specifying are Loch Leven, St. Mary’s Loch, and Loch Ken. The first, situated in Kin­ross-shire, is four miles in length by two in breadth, having the Lomond hills on its east, and Benarty hill on its south ; whilst the towns of Kinross and Milnathort lie on its western margin. This lake is remarkable for a peculiar species of red trout, which is highly valued;@@\* and it also produces char, perch, pike, and other species of fish. The fishery is let for a considerable sum ; and it is a remarkable fact that Loch Leven is the only Scottish lake that yields any revenue to its proprietors. There is not even an attempt made to de­rive any profits from any other lake ; nay, they are not fish­ed for the domestic consumption even of the neighbouring inhabitants. But Loch Leven is principally celebrated for an island in the lake in which are the picturesque ruins of a castle, where Queen Mary was confined by her subjects, and from which she effected her escape (1568) a few days previous to the fatal battle of Langside. There are other small islands in the lake, the principal of which is St. Serf’s, where was once a famous monastery, of which Andrew Win­ton, author of the *Chronykil of Scotland,* was prior. St. Mary’s Loch, **a** most beautiful and picturesque sheet of wa­ter, three miles in length by from half a mile to a mile in breadth, is in Selkirkshire. Loch Ken is formed by the expansion of the river Ken in Kirkcudbrightshire, and forms part of the river. It is ten miles in length by rather less than a mile in breadth. The other lakes are all north of the Firths of Clyde and Forth. Loch Lomond is the most cele­brated as well as the largest lake in Scotland ; indeed, it is the largest in the British dominions. This noble sheet of water is above twenty-four miles in length, its greatest breadth is ten miles, but, towards its upper part, it is not more than half a mile. Its depth varies from twenty to a hundred and twenty fathoms, and its greatest depth is towards the north. It is stud­ded with numerous and richly wooded islands, some of them being very small, but the largest, Inchmurrin, is two miles in length and one in breadth. Some of them, particularly Inch­murrin, are stocked with deer. Both sides of the lake are flank­ed by high and rugged mountains, among which “ the lofty Ben Lomond” stands conspicuous, its height being 3195 feet above the margin of the water. The surface water of Loch Lomond is from three to five feet higher in winter than in sum­mer ; but its mean height is about twenty-two feet above the level of the sea at Dunbarton. Its surplus water is convey­

ed to the Clyde, a distance of six miles, by the river Leven. Loch Katterin, so celebrated in Sir Walter Scott’s *Lady of the Lake,* lies in the district of Menteith, Perthshire, and is one of the most romantic in Scotland. Its length is eight miles, and its greatest breadth less than one. It does not seem necessary to give a minute description of the other lakes; but the following table, taken from the *General Report of Scotland,* will shew their number, dimensions, and situation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name. | Length in miles. | Greatest breadth in miles. | Square miles. | Counties where situated. |
| 1. Lomond.... | 24 | 7 | 45 | Dunbarton and Stirling |
| 2. Awe | 25 | 21/2 | 30 | Argyle. |
| 3. Ness | 22 | 21/2 | 30 | Inverness. |
| 4. Shin | 20 | 11/2 | 25 | Sutherland. |
| 5. Maree | 12 | 3 | 24 | Ross, west coast. |
| 6. Tay | 15 | 2 | 20 | Perth. |
| 7. Arkeg | 12 | 2 | 18 | Inverness. |
| 8. Shiel | 16 | 1 | 16 | Inverness, west coast. |
| 9. Lochy | 16 | 1 | 15 | Inverness. |
| 10. Laggan.... | 8 | 11/2 | 12 | Inverness. |
| 11. Morrar | 9 | 2 | 12 | Inverness. |
| 12. Fannich ... | 7 | 11/2 | 10 | Ross, centre. |
| 13. Ericht | 14 | 2 | 10 | Perth and Inverness. |
| 14. Earn | 8 | 11/4 | 9 | Perth. |
| 15. Naver | 6 | 2 | 9 | Sutherland. |
| 16. Stennis .... | 8 | 2 | 8 | Orkney, mainland. |
| 17. Rannoch... | 9 | 1 | 8 | Perth. |
| 18. Leven | 4 | 2 | 7 | Kinross. |
| 19. Fuir | 4 | 2 | 6 | Ross. |
| 20. Lydoch | 6 | 1 | 6 | Perth and Argyle. |
| 21. Dee & Ken | 10 | 03/4 | 6 | Kirkcudbright. |
| 22. Loyal | 6 | 1 | 6 | Sutherland. |
| 23. Glass | 5 | 1 | 5 | Ross, east. |
| 24. Katterin... | 8 | 03/4 | 5 | Perth, Menteith. |
| 25. Doon | 9 | 1 | 4⅛ | Ayr. |
| 26. Huichart... | 3 | 1 | 3 | Ross. |

In a general point of view, Scotland may be separated, geologically as well as geographically, into three portions. By passing a line on the map nearly straight from Stone­haven, through Dunkeld, to the middle of the Isle of Bute, and thence with a slight curve to the Mull of Cantyre, we shall have traced the southern boundary of the primary non­fossiliferous system of rocks. Another line, but much more irregular than the former, drawn from St. Abb’s Head in Berwickshire, passing near Peebles, Sanquhar, and New Cumnock, to the south of Girvan on the western coast, will form a general parallelism with the former line, and will contain the old greywacke, now named the Cumbrian sys­tem, lying to the south, and extending to the boundary between England and Scotland, whilst the land included be­tween the two lines comprehends the old red sandstone, and great central basin of Scotland.

That extensive tract of Scotland which constitutes the northern division, is composed chiefly of gneiss, mica slate, chlorite slate, and clay slate, with subordinate masses of hornblende slate, talc slate, and primitive limestone. These, with granitic centres, often rise into magnificent mountains, of which the Grampians form a part. In many of these de­posits, particularly in the mica slate, garnets of a brown colour are very abundant. In the primary deposits no or­ganic remains have ever been discovered.

These, however, are not the only stratified formations which constitute this extensive district. The old red sandstone fringes the extremities of the land, commencing near the

@@@1 Statistical Account of Scotland.