

glomerate, holding fragments of fossil wood and iron stone nodules, merging into a soft grey sandstone; the latter becomes more feldspathic towards the top, and altering to an arkose. On the top of all is a deposit of boulder clay. This rests on the Palaeozoic limestone which forms the country rock of the Illtyd range. The contact between the sandstones and limestones was not seen, but they appear to be conformable, or nearly so. From their lithological resemblance to Cretaceous rocks in other parts of the North-west, the sandstones have been tentatively referred to the same age. No fossils, except the fragments of wood, were found in them.

These sandstones form cliffs on either side of the river down to a point within two miles of the Little Wind river, where they are replaced by the massive grey limestone of the Illtyd range, which here crosses the river diagonally. They have been gently folded into a series of low anticlines and synclines, which strike north parallel to the bordering mountain range, and have no doubt been affected by the orographic movements, which raised them above the floor of the plateau. They almost completely surround the Illtyd range and separate it from the main range to the south.

THE ILLTYD RANGE.

The Illtyd range is anticlinal in structure. It strikes north and slightly west of north, and is parallel to a similar range on the east side of the Bonnet Plume river. It is composed of massive, grey dolomitic limestones, and where it crosses the Wind river, these become slightly crystalline. For two miles the Wind river flows in a gorge-like valley bordered by cliffs of these limestones, and shortly below the mouth of the Little Wind river, it breaks through the range, and enters again the level plateau country. On its northern side the Illtyd range has a very gentle slope, and the limestones dip at a very low angle beneath the overlying Cretaceous sandstones. The highest point of the range is about 4,200 feet above the sea.

Below the Little Wind river, the Wind river widens considerably. It is filled with gravel bars and the valley is shallow. Near Mount Deslaurier it cuts into the eastern bank, exposing a section of soft grey sandstone, 100 feet thick, overlaid by some clay.

Mount Deslaurier itself is a west-facing fault scarp, rising abruptly from the water's edge to a height of 850 feet, and sloping gently away on the opposite side. It strikes parallel to the course of the stream, which it follows for four or five miles. It is composed of about four hundred feet of dark reddish conglomerate, containing angular and water-worn fragments of limestone, quartzite and other rocks; below this is a brecciated limestone, which, near the contact, also carries some