

mental region is about 800 feet; the lowest part being that surrounding the Winnipeg group of lakes, which have an elevation of about 700 feet. From this it slopes up southward, and attains its greatest elevation—960 feet—at its termination far south in Minnesota. The edges of this prairie level are also, notwithstanding its apparent horizontality, considerably more elevated than its central line, which is followed by the Red River. Its width on the forty-ninth parallel is only 52 miles; its area, north of that line, may be estimated at 55,600 square miles, of which the great system of lakes in its northern part—including Lakes Winnipeg, Manitoba, Winnipegosis, Cedar, and St. Martin's—occupy 13,900 miles. A great part of this prairie level is wooded more or less densely, and much of the low-lying land near the great lakes appears to be swampy and liable to flood. The southern part, extending from the boundary line nearly to the south end of Lake Winnipeg, includes the prairie of the Red River valley, with an area of about 6,900 square miles; one of the most fertile regions, and, at the same time, the most accessible portion of the Northwest.

The superficial deposits of this stage are chiefly those of a great lake which occupied its area after the glacial submergence. This part of the interior of the continent being the last to emerge from the Arctic waters and having been covered for a long time afterward by a sea of fresh water, held back either by drift deposits or by rocky barriers, which have subsequently been cut through, and which must have united all the lakes now found in the region into one sheet of water, which extended with narrower dimensions about 200 miles south of the boundary line.

The Red and the Assiniboine Rivers and their tributaries have not yet cut very deeply into its alluvial deposits and its surface is level and little furrowed by denudation.

The second steppe of the plains is bounded to the east, as already indicated, and to the west by the Missouri coteau, or edge of the third prairie level. It has a width at the forty-ninth parallel of, probably, 200 miles, though it can not there be strictly defined. Its total area is about 105,000 square miles, and includes the whole eastern portion of the great plains, properly so called, with an approximate area of 71,300 square miles. These occupy its southern and western portions, and are continuous westward with those of the third prairie steppe. To the south, the boundaries of this region appear to become more indefinite, and in the southern part of Dakota, the three primary levels of the country, so well marked north of the line, are probably scarcely separable. The rivers have acted on this region for a much longer time than on the last-mentioned, and are now found flowing with uniform currents in wide ditch-like valleys, excavated in the soft material of the plains, and often depressed from 100 to 300 feet below the general surface. In these the comparatively insignificant streams wander from side to side, in tortuous channels, which they only leave in time of flood. The surface of this prairie steppe is also more diversified than the last, being broken into gentle swells and undulations, partly, no doubt, by the action of denudation, and partly, also, as will appear, from the original unequal deposition, by currents and ice, of the drift material which here constitutes the superficial formation. The average altitude of this region may be taken at 1,600 feet, and the character of its soil and its adaptability for agriculture differ much in its different portions.

The third or highest prairie steppe may be said to have a general normal altitude of about 3,000 feet, though its eastern edge is sometimes little over 2,000 feet and it attains an elevation of 4,200 feet at the foot of the Rocky Mountains.

Obviously none of the third steppe would fall within our limits were it not for a curious exception that is presented by the Turtle Mountain, which, though belonging to the third steppe, stands like an island upon the open sea of the second. Of this Dr. Dawson says:

Turtle Mountain, an outline of the third prairie steppe, is a broken, hilly, wooded region, with an area of perhaps about 20 miles square (400 square miles), and slopes

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