

The Great Sands Hills, Southwest Saskatchewan: Among the Largest Active Sand Dunes in Canada

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The Great Sand Hills in southwestern Saskatchewan cover an area of approximately 1,900 square kilometers (730 square miles). The aeolian landforms originated from sediments deposited by glacial meltwaters during the retreat of the Laurentide Ice Sheet beginning approximately 13,000 years ago. The subsequent modification and reworking of these sand deposits by strong winds created a landscape of rolling topography with open sand dunes and unique dune complexes. The Great Sand Hills is an area of contrasts with open sand dunes, stabilized sand dunes, grasslands, juniper and shrub land, saline lakes and wetlands, pebble plains, and cotton wood groves and aspen bluffs.

While the name "Great Sand Hills" conjures up an image of great relief and topography, few individual dunes rise more than 15 meters (50 feet) above the surrounding plain. The ruggedness of the topography is the result of steeply sloping dunes located close together.

The sparse ground cover has limited organic material and has low moisture holding capacity of the soil which is coupled with broken topography. This has created a situation of great sensitivity to any kind of disturbance. Accordingly, the thin and fragile soils are extremely susceptible to wind erosion which exposes the underlying sands. Presently, less than one percent of the area which consists of 19 square kilometers (7 square miles) is exposed sand in active sand dunes.

The Great Sand Hills are among the largest active sand dunes in Canada. These dunes are the second largest in Saskatchewan after the Athabasca Sand Dunes in northwest Saskatchewan located along the southern shore of Lake Athabasca. The above-mentioned information is provided at the Interpretation Centre (Tourism Saskatchewan) in Great Sands Provincial Park. This area is located approximately 20 km south of the village of Sceptre and was visited by the senior author in October, 2021.