

Nature Notes

Crafted By Ice



The Kimberley Nature Park (KNP) features we enjoy today were all either created or modified by the actions of ice and water, actions that left lots of evidence behind for us to find today.

Most of the reddish coloured bed rock (Aldridge formation) in the KNP was laid down as silt deposits in an ancient ocean 1.5 billion years ago and exposed for us today by the actions of glaciers and glacier melt.

14,000 years ago there were large glaciers coming down Mark Creek, Matthew Creek, and an even larger flow of ice coming out of what is now the St. Mary's Valley. These glaciers would be large by present standards but they collided near Kimberley with a mega-glacier flowing south down the Rocky Mountain Trench. When this ice age was at it's peak the top of the ski hill and all other local peaks with rounded tops were under ice. This huge mass of ice was gone by 6000 years ago except for a few small remnants in the high alpine, but the ice did leave it's mark. If you hike to the top of Bear Mountain you will find grooves gouged into the rocks, grooves created by ice flowing toward the Rocky mountain trench. In several locations in the KNP there are boulders called glacial erratics carried here by glaciers then left behind when the ice melted. The many rounded rocks you see beside road and trail cuts also were carried here as part of glacial debris.

Lower Jimmy Russell Road takes you past some beds of sand deposited when melt water from the Mark Creek glacier was blocked by the remnant St. Mary's/Trench glaciers and hence formed a temporary lake. If you amble along Romantic Ridge, Ponderosa, or Luna trails you are walking on water worn debris and the view to the sides would once have been of large chunks of debris covered remnant ice left behind as the main glaciers receded. Eimer's lake similarly is a kettle feature formed because a chunk of ice took longer to melt than did the surrounding ice, as are many other small depressions in the KNP. The last ice to melt out would have been in the bottom of these low points hence they are surrounded by the material that had been atop the ice.

The next time you explore the KNP watch for the many signs of our icy past.



Depression left by ice near Eimer's ridge.

Visit www.rockies.net/kimberley/naturepark for a hard copy or more information about Nature Park events