**Introduction**

The Jumbo Mountain 7.5' quadrangle, located in the northern Bitterroot Mountains along the Montana-Montana border, contains a rich fossil fauna that includes the oldest known occurrence of the mammal *Parahesperodons*. The area is characterized by its diverse rock types and structural features.

**Geologic Setting**

The area is underlain by Mesoproterozoic quartzite of Janke Lake and Mesoproterozoic quartzite of Carmen Creek. These formations are part of an immense east-facing succession of quartzite, schist, and shale that was deformed and metamorphosed during the early Precambrian. The area is also characterized by a series of north-south-trending faults and folds, including the main thrust fault that lies about 10 km west of the map area.

**Glacial Deposits**

Extensive glaciation occurred in the Pleistocene, and the resulting outwash and till cover almost the entire eastern half of the map. Glacial outwash gravels of last local glacial maximum (Pinedale) (Pleistocene)—white to light gray, poorly sorted sandy cobble to boulder gravel and cobbly sand (Soil Survey Staff, 2012). Soils weakly developed.

**References**


**Correlation Diagram**

Fig. 3. Upper right half of photo shows lenticular beds of quartzite in argillite, characteristic of the Lawson Creek Formation (Mesoproterozoic) (Burmester and others, in preparation). The strata are part of an immensely thick (> 10,000 m [32,000 ft]) east-facing succession of quartzite, schist, and shale that was deformed and metamorphosed during the early Precambrian. The area is also characterized by a series of north-south-trending faults and folds, including the main thrust fault that lies about 10 km west of the map area (Lonn and others, 2008, 2009a, in preparation 2013b).