

Dip Creek Pingos, Klondike Plateau

Location: 62.648563°N 138.738485°W

DETAILS:

Pingos in this portion of upper Dip Creek valley are typical of those situated in the bottom of moderately broad unglaciated v-shaped valleys of low order streams in central Yukon. Lipovsky and Bond (2012) map five pingos in the immediate vicinity within two similar colluvial map units. Uncollapsed pingos in southeast-facing tributary valleys developed in gentle aprons of colluvial silty diamicton overlain by veneers of poorly decomposed (fibric) organic matter. Pingos in northwest-facing tributary valleys are found within the same colluvial aprons, but lack the organic veneer. Two of the three pingos in northwest-facing streams are collapsed (sites 10PL036 & 10PL039).



Figure 1 Collapsed open system pingo (10PL039) with thaw pond in tributary to upper Dip Creek, Dawson Range. The pingo formed in silty colluvial diamicton. The collapse pond is 50 m in diameter. Note conifer and deciduous tree growth due to better drainage on the collapsed pingo rim as compared to the surrounding fan. Looking south. Note afeis in creek which indicates year round groundwater flow controlled by discontinuous permafrost (also the source for pingo ice core development). A second collapsed pingo (see Figure 2) is visible in the background drainage.



Figure 2 *Oblique aerial view of a collapsed pingo (10PL036) with a central crater which formed in a northwest-facing first order tributary valley. The collapse pond is approximately 50 m wide and the crater rim is up to 20 m high.*

REFERENCES AND FURTHER READING

*Bond, J.D. and Lipovsky, P.S., 2012. Surficial Geology of Colorado Creek (115J/10). Yukon Geological Survey, Energy, Mines and Resources, Government of Yukon, Open File 2012-2, scale 1:50,000.