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## Testing hypotheses of drumlin genesis against observations from a drumlin swarm on the Thompson Plateau, British Columbia, Canada

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Drumlins have long been a contested landform in terms of their genesis and implications for ice sheet flow. Drumlins, composed of bedrock and/or sediment, are common within the footprint of the Cordilleran Ice Sheet. They have been attributed to enhanced ice abrasion, till accretion, meltwater erosion, and a combination of subglacial deformation and meltwater erosion. They have been associated with ice flow directions, ice streams, ice retreat, and flood (underburst) tracks. Yet detailed form-process studies on which to evaluate these propositions are lacking, in particular knowledge of the internal composition and architecture of drumlins is rarely known with any certainty, yet is critical to evaluating process models. The process linkage between drumlins, subglacial hydrology and ice dynamics is still a critical problem to be solved and requires careful consideration of the landform shape, internal composition and architecture, and broader landform and sediment associations.

We present geomorphological, sedimentological and shallow geophysical observations of drumlins on the Thompson Plateau in interior British Columbia and use these to evaluate existing hypotheses of drumlin genesis.