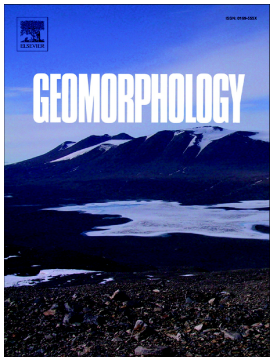

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PII: S0169-555X(17)30103-4
DOI: doi: 10.1016/j.geomorph.2017.02.013
Reference: GEOMOR 5929

To appear in: *Geomorphology*

Received date: 24 November 2015
Revised date: 6 December 2016
Accepted date: 18 February 2017

Please cite this article as: Christopher Scarpone, Margaret G. Schmidt, Chuck E. Bulmer, Anders Knudby , Semi-automated classification of exposed bedrock cover in British Columbia's Southern Mountains using a Random Forest approach. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Geomor(2017), doi: 10.1016/j.geomorph.2017.02.013

Semi-automated classification of exposed bedrock cover in British Columbia's Southern Mountains using a Random Forest approach

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Abstract

Knowledge of the spatial distribution of exposed bedrock (EB) is essential for natural resource inventories, environmental monitoring, and landscape evolution modelling. This paper presents a method for the use of a Random Forest (RF) classifier and legacy land data to locate areas of EB in a mountainous landscape of southern British Columbia, Canada. EB map accuracy increased from 48% to 88% with the use of RF models in comparison to the legacy land cover maps. Reducing the total number of predictor variables from 43 to 17 had a negligible effect on prediction accuracy.