

## HUMAN FOOTPRINT MAPPING IN ALBERTA: USING REMOTE SENSING DATA TO MONITOR STATUS AND TRENDS IN LAND USE TRANSFORMATIONS.

**Branko Hricko**, GIS Coordinator  
Geospatial Center  
Alberta Biodiversity Monitoring Institute  
CW 405, Biological Sciences Building  
University of Alberta  
Edmonton, Alberta  
Canada, T6G 2E9  
[hricko@ualberta.ca](mailto:hricko@ualberta.ca)

The Alberta Biodiversity Monitoring Institute (ABMI) tracks changes in human footprint and reports on the status of and changes in land use across the province of Alberta. One of the key goals of the Institute is to provide scientifically credible and understandable information on the amount and location of multiple human footprint features to support natural resources management and sustainable land stewardship. The ABMI creates province wide human footprint and sample based human footprint data layers using and interpreting high resolution satellite scenes and aerial images post processed into orthorectified mosaics. Both human footprint datasets are updated on multi-temporal base. The sample based dataset is updated annually starting from 1999. The province wide dataset is updated every other year. The produced data and information are publicly available and go to support all the scientific and monitoring analyses performed by ABMI staff, as well as external clients, researchers, and stakeholders. For instance, at ABMI the data are used to describe species-habitat associations and changes in human footprint during past decades. It is essential to understand how human disturbance has and is progressing over period of time in order to make better informed land use decisions.