UNIVERSITY OF ALBERTA

April 13, 2022

Postdoctoral position in Forest Biodiversity in the Department of Renewable Resources, University of Alberta.

We are seeking an individual interested in forest management, biodiversity and ecosystem function to play a key role as a postdoctoral researcher within the NSERC IRC in Ecosystem-based Forest Management. The overall goal is to provide the scientific knowledge basis for development of forest management approaches to improve the resilience of forest ecosystems, and the diversity of values they provide, under climate change.

The emphasis of the postdoctoral work will be on 1) synthesis of integrated datasets (plant diversity, forest structure, CWD) from new field research comparing managed and wildfire disturbed forests, and 2) synthesis of long-term integrated datasets from the large-scale EMEND forest biodiversity experiment (https://tinyurl.com/3ece2b6h).

Ongoing research in the IRC focuses on comparing naturally (fire) and anthropogenically (harvest) disturbed forests in Alberta, with an emphasis on aspen and pine dominated forests. The successful candidate would assist with student mentoring of research comparing the structure and function of fire skips and harvest residuals with a view to informing retention practices in support of forest biodiversity.

EMEND has been a focal point for the study of ecosystem-based management and retention forestry for two decades. Core data sets collected every five years include: diversity of tree species, shrubs, beetles and vascular plants. In addition, tree regeneration, forest productivity, forest carbon and CWM data have been collected. We are seeking an individual who is interested in working with these datasets to develop synthetic perspectives on results from EMEND. This will involve collaboration with U of A and Canadian Forest Service scientists contributing to the synthesis. Design of additional research by the candidate that complements their interests will be encouraged. The lab is exceptionally well equipped with recent additions of a drone platform (lidar, multispectral), TLS and microclimate monitoring. The position is planned for an initial term of 2 years with a third year possible and annual extensions granted based on progress towards agreed upon goals. The position includes funding to support travel for field research and communication of research results at conferences.

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Qualifications: We are looking for a highly collaborative individual with strong quantitative and writing skills. Experience analyzing forest biodiversity, carbon, productivity, or structure data would be an asset in developing analyses of potential tradeoffs and synergies. Knowledge of methods of analysing ecosystem multifunctionality would be an asset. A strong publication record is desirable.

We offer a competitive salary and health and supplemental benefits (https://tinyurl.com/2ez9vmur). The City of Edmonton maintains an affordable cost of living with a high quality of life. Situated along the North Saskatchewan river, the river valley is one of the largest urban green spaces in North America. Banff and Jasper offer unprecedented mountain experiences within driving distance of Edmonton.

We especially encourage individuals from underrepresented groups to apply.

Interested candidates should send a motivation letter and CV to Dr. Charles Nock (nock@ualberta.ca) for more information.