

## Research Assistant in Agroecology & Climate Change Mitigation

**Description:** The Canadian government's Agricultural Climate Solutions Program is a new initiative, which aims to rapidly promote climate change mitigation through enhanced carbon sequestration and dramatic reductions in greenhouse gas (GHG) production. This program is unique because the work will be conducted in partnership with farmers who will co-design, test and refine beneficial management practices (BMPs) on their own farms. The Peace Region Living Lab is led by a cohort of Applied Research Associations that primarily work with beef, grain and forage producers. We are seeking two enthusiastic students to assist with this exciting work. Successful candidates will: (1) work with farmers to collect and process 'baseline' soil carbon samples; (2) monitor GHG (particularly N<sub>2</sub>O) emissions from a sub-set of sites; (3) collect grain, seed, straw, feed, soil and manure samples to help understand the potential to reduce fertilizer N use; and (4) collect additional field data to validate and verify remote sensing tools for monitoring BMP adoption and farm productivity. The work will involve both field and lab work; you will gain experience in collection of soil, plant and GHG samples and data; sample processing; data logger programming and maintenance; organization and processing of field samples, and much more.

Travelling (driving pickup -1/2 or ¾ ton) and visiting farms all over the BC and AB Peace region; following government and farmer protocols and safety requirements. Under a range of conditions (cold, warm, insects), walking across fields or farmyards to collect samples or make observations. Operating manual and hydraulic soil samplers, installing sampling chambers and operating mobile gas analyzer while taking associate soil measurements such as temperature and moisture; communicating clearly and respectfully with farmers under all situations and keeping notes of farmer information, working independently with little direct supervision, some physical strenuous in walking on uneven terrain, bending to collect plant samples, lifting up to 20 kg for short periods and similarly manipulating equipment, strictly following all safety protocols. Working closely with scientists and ARA staff. Keeping records and reporting anomalies and problems.

Qualifications:

1. Basic skills and some knowledge of standard soil analytical lab procedures.
2. Full driver's license (not an "L" or "N")
3. Some experience with field work or being outdoors.
4. Enthusiasm for agro-ecology, climate change mitigation, farm nutrient budgeting and/or greenhouse gas emissions.
5. Self-motivated, organized and keen to participate in a new and exciting way to do research in partnership with farmers.

Work location: On-site at Beaverlodge Research Farm with a mix of field and lab work.

Duration: One to two terms (two terms preferred) - September 2022 to December 2022 AND January 2023 to April 2023

Salary starting at \$19.48 per hour (higher pay scale commensurate as per experience), 37.5 hours per week.

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