



# ALBERTA BOREAL CAREERS PROJECT

## Emma Kniel

Forestry Educator



**WORK WILD.**

### Emma's Bio

As a forestry educator, I spend my days travelling the province speaking to students about Alberta's forests! This year has changed my job with the move towards virtual learning. I now have to exclusively speak with students remotely and rely much more on technology than before.

Personally, I love spending time outside, especially with my dog and family. Some of my favourite days of my job are when we take students outside to learn directly in the forest!

We are always speaking with students on ways to promote stewardship within their classes, including planning a few tree planting events at various schools and communities.

If you learn one thing from me, it should be that not everyone who works in forestry are lumberjacks! Based on your interests, there is almost certainly a job for you!

## Charlotte Ratcliff

Silviculture Supervisor



### Charlotte's Bio

I prescribe how to reforest parcels of land that have been harvested. This involves tasks like site preparation, cone collection, seedling growing, planting, stand tending, herbicide application, surveys, and pre-commercial thinning.

In the last 10 years, I went from paper maps, compasses, ribbon, and pen and paper data collection in the field to all digital data collection via tablet, digital maps and drones. I think the future of my job will involve a lot of drone flying and real time data being collected in the field, meaning less field time because real-time pictures of what's happening in the field become more accurate and available.

In my free time, I enjoy Olympic weightlifting and spending time in the mountains with my son and dog. Since I'm very busy during the summer, the shoulder seasons (spring and fall) are my favourite time of year to go exploring.

I am bound by a code of ethics to practice environmental stewardship on the land. However, I became a Silviculturist because I believe in sustainability. I believe putting back what we take is the right thing to do, and I've made it my life's work to regrow the forests of Alberta. I have had the privilege to be part of putting in 61.9 million seedlings over my career. We make sure each and every cutblock we reforest is coming back as a productive forest over many different surveys, and many years. It is in Millar Western's and ALL of Alberta's best interest that we reforest to the best of our ability.

Forestry is an ecologically and economically sustainable resource that is constantly changing and growing with new technology and research. The practice is always changing to reflect better forest management.

## Lisa Pollio

*Project Manager*



**PetroLMI**  
DIVISION OF ENERGY SAFETY CANADA

### Lisa's Bio

At PetroLMI, I manage projects to promote and bring awareness to different careers in the oil and gas industry. I have been with the company for almost 8 years in three different roles. I think the future at my job will continue to involve advancing technologies.

When I'm not at work, I love to travel around the world, I've been to 29 countries, so far! This career has allowed me to visit many different parts of Canada, which has been awesome!

I have been able to learn about some amazing new technological advances in our industry that are preserving our environment. Canadian oil and gas is the cleanest in the world and I am happy to be a part of it!

There is so much diversity in the oil and gas industry! It is a current and progressing business with so many opportunities to have a challenging and fulfilling career!

## Amit Saxena

*Technical Lead, Wildlife & Biodiversity*



  
Canadian Natural

### Amit's Bio

My job is to help reduce the impact of oil and gas development on wildlife and biodiversity. I mainly work on wildlife species at risk, but this also means working on plants and habitats, and also with oil and gas operations staff and engineers. Environmental management and planning has become more and more important for the energy sector because our stakeholders and the general public demand sustainable and responsible development.

In my free time, I spend a lot of time outdoors with my kids and family. We do a lot of hiking, camping and exploring/learning about nature.

My career allows me to directly influence how oil and gas sites are planned and how operations are conducted to conserve wildlife species - something that I love - and other valuable parts of our biodiversity. By avoiding impacts wherever possible, and doing whatever we can to make up for other impacts, I can ensure that wildlife can co-exist on the same land as our oil and gas developments.

While it is smart to start moving toward renewable energy sources, fossil fuels are still the only form of energy that can meet our energy demands now and for the foreseeable future (many decades). Canada has significant fossil fuel reserves, and it is very important that we develop them in a responsible way. I take great pride in developing a truly Canadian resource in a Canadian way.

## Sarah MacDonald

*Watershed Planner*



  
Athabasca  
WATERSHED COUNCIL

### Sarah's Bio

I manage the Athabasca Watershed Council (AWC) projects. I apply for grants, estimate budgets, and collaborate with partners in the Athabasca Watershed, Alberta, and Canada. Since I started my job, I have seen an increase in collaborative projects, meaning an increase in time spent collaborating, applying, and researching grants and funders for various projects will be valuable for my job in the future.

I enjoy being outside and around any waterbody. As a watershed planner, I am lucky to be able to work around wetlands, lakes, and rivers during the summer months. In the winter months, I work in the office to plan for working outside in the summer months.

My career directly allows me to practice environmental stewardship, since the AWC is an environmental stewardship group and supports other environmental stewardship groups.

If the Environmental Not-for-Profit sector interests you, set aside a bit of time a day to update yourself on current Environmental Science related news in your region, I use google news and Twitter. If you can, get involved in student council to understand governance, become comfortable with public speaking, and learn about formal meeting formats.

## Camille Scheibner

Co-Instructor -  
Community-Based  
Environmental  
Monitoring (CBEM)  
Program



### Camille's Bio

I get to help others learn more about nature and how we can protect and promote the environmental systems that are vital to the health of our planet. Since starting out, my job has changed in that the ideas and thoughts that I have had about connection and relationship with nature since I was young are now more readily available and present in environmental education.

In my free time, I like to spend time in the forest and other natural places where I can breathe clean, fresh air and witness the wonders of the complex ecosystems found in the boreal. My career has allowed me to see parts of the world I could never have imagined! I have been to remote locations all over Alberta that have been relatively untouched by humans and the joy I have experienced in being there is what drives me to do what I can for the environment.

Remember: the natural world is always going to be changing! It is dynamic and we as environmental practitioners need to be able to adapt so that we can continue to protect and connect with the more-than-human beings we share this planet with.

## Sara Loutitt

Co-Instructor CBEM



### Sara's Bio

I develop culturally relevant and applicable content into the existing environmental monitoring courses for the Community Based Environmental Monitoring (CBEM) Program. Maintain the inclusion and involvement of Indigenous communities and knowledge keepers into the CBEM delivery. The work that I do is always evolving and growing as more institutions and communities are realizing that Indigenous ways of knowing and methodologies are necessary for environmental restoration and sustainability.

My idea of a fun day or experience is going out on the land and connecting with nature regardless of the season or time of the day. My current work role allows for the planning and engagement of Indigenous science and knowledge in a hands-on manner with four seasonal weeks on the land, learning and participating in culturally relevant teachings.

I have a renewed concept of 'stewardship' in that the Earth stewards itself and humans need to redefine our idea of being on the top of a hierarchical platform of 'caretaking' the environment that we have been very disrespectful to.

Students and essentially all of humanity needs to acknowledge that ALL BEINGS have a duty to work for the continuation of life. We need to let go of exploitation of any thing that we have seen as a resource to seeing them as a relative, a kind and giving relative that is waiting for us to live in a reciprocal, right, and honorable manner.