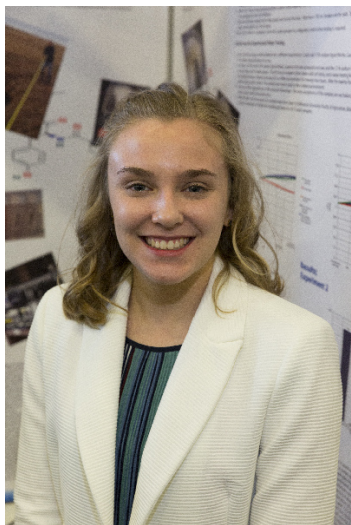


## CWSF 2018 - Ottawa, Ontario



### Autumn Heukshorst

#### Beneath the Surface

**Challenge:** Environment

**Category:** Senior

**Region:** Chignecto West

**City:** Milford Station, NS

**School:** Hants East Rural High School

**Abstract:** Beneath the Surface is an experimental project which uses milk to be more than a benefit to human health. It can improve the environment by improving water quality. By extracting Casein, the main protein found in milk, and combining it with Chlorine it can be used to improve the pH of water from rivers, brooks, and ponds, to make it suitable for human consumption.

#### Biography

My name is Autumn Heukshorst, I am 17 years old, and attend grade 12 at Hants East Rural High. My favorite subjects at school have always been science related. Other passions of mine are being a member of our student council, the "youth who care" club and the grad committee. If I'm not in the classroom, I can be found running the streets of Milford with our cross country running team, and the track and field team, or be seen making a splash at the local swimming pool, with our high school swim team. I am fortunate enough to have a job that gives me the opportunity to work with people of all ages and abilities as a swim instructor, coach and head lifeguard. Acadia University eagerly awaits my arrival, in their Bachelor of Science program, majoring in Biology, which is the beginning of my dream of becoming a Pediatrician. Inspiration for my project came from growing up on my parents dairy farm, in Milford, Nova Scotia which is surrounded by the Shubenacadie River and the National Gypsum Mine. I wanted to find another use for Casein, hoping I could improve the water quality of our hard water.