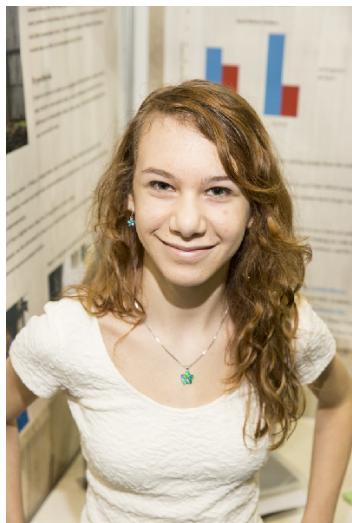


## CWSF 2015 - Fredericton, New Brunswick



### Emma Fedusiak

#### Is Vaccinating an Udder Mistake?

**Challenge:** Environment

**Category:** Intermediate

**Region:** Parkland

**City:** Foam Lake, SK

**School:** Foam Lake Composite High School

**Abstract:** My project investigates whether the anthrax vaccine has an effect on conception rates in cattle. I vaccinated half of a herd of heifers with the anthrax vaccine and half with a control substance which was sterile water. An ultrasound machine was used to check and see which heifers were pregnant. I then compared the pregnancy results between the vaccinated and unvaccinated heifers.

#### Biography

My name is Emma Fedusiak, and I'm from Foam Lake, Saskatchewan. My hobbies include writing, reading, singing, acting, and playing the piano. I ride horses, curl, and dance. My favourite classes in school are math and science. After I graduate high school, I plan to go to the University of Saskatchewan, where I will study to eventually become a veterinarian. My project investigated whether or not the anthrax vaccine affects conception rates in cattle. I was inspired to do this project by my parents who are both veterinarians. In 2006 there was an outbreak of anthrax in Saskatchewan that affected many cattle producers in my area. Despite the large losses that many faced they are worried that using the anthrax vaccine will decrease pregnancy rates in their cattle. To continue on with my project, I am gathering data on the outcome of the heifers pregnancy this includes info on any calf losses at birth, assistance needed etc. I would like to repeat the original experiment with even larger numbers of cattle. I would also like to study what happens if cows are vaccinated in early pregnancy instead of before breeding.

#### Awards

#### Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000

