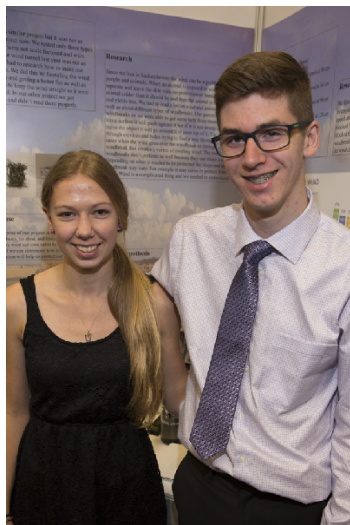


# CWSF 2016 - Montreal, Quebec



## Tanner Stevens, Crystal Daniel

### Out of the Elements

**Challenge:** Environment

**Category:** Intermediate

**Region:** Prairie Valley

**City:** Avonlea, SK, Avonlea, SK

**School:** Avonlea School

**Abstract:** We tested which common windbreak worked best for protecting livestock, we predicted the Fence would do the best. We constructed a wind tunnel and made windbreak models 18 times smaller than the original ones and recorded the wind from 0-3ft. away from the windbreak. We found that the fence did best by blocking 87% of the wind.

### Biographies

Tanner - I am from Avonlea Saskatchewan (Population 400) and go to Avonlea School. I am in Grade 10 and hope to become an Orthodontist in the future. I play Volleyball, Curling, Badminton, Archery, and Track and Field where I have placed many times. I am also a part of the Milestone 4-H club where I am a part of the Beef club. I have two dogs and some cows that I want to be healthy and safe. My partner and I were inspired to do our project because we wanted to keep our cattle as safe and healthy as possible because wind can significantly affect livestock productivity. We are possibly thinking of designing our own windbreak with the best qualities from...

Crystal - I'm Crystal Daniel from the small town of Avonlea Saskatchewan. I have lived on a farm my entire life and have always had an interest in animals. I got the idea of for my project from my own 4-h steers. I wanted them to be as healthy as possible. So my partner and I wanted to see what windbreaks blocked the most wind because when wind hits the animals hairs the hairs begin to separate causing the animal to use their body fat. and in our steers we want them to have as much body fat as they can. My partner and I just wanted to help out animals to save as much body fat as they can to stay warm in the cold winters and windy days we have here in Sas...

### 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