

# CWSF 2016 - Montreal, Quebec



## Maria Duynisveld

### Something in the Way They Mooove

**Challenge:** Resources

**Category:** Intermediate

**Region:** Chignecto East

**City:** Wallace, NS

**School:** Pugwash District High School

**Abstract:** Do pasture management systems affect cattle foraging behavior and efficiency? Beef cattle grazing behavior and grazing uniformity were studied in medium and high stock densities. High-density increased grazing uniformity and added a third grazing spike in the afternoon, resulting in five grazing bouts as opposed to the typical four. Uniform grazing can increase soil carbon sequestration. Afternoon grazing can increase sugar intake, increasing animal gain.

#### Biography

My name is Maria Duynisveld, I am 15 years old, and I am in grade 9 at Pugwash District High School. In 2015, I was a gold medalist at CWSF in Fredericton. I am an active member of 4-H, and am the Head Editor of my school's yearbook committee. I am also very involved in sports. In 2015, I had the privilege of competing in long and triple jump at the Legion National Youth Track and Field Championships in St. Therese. My project looks at the effects of pasture management systems on cattle behavior and pasture use efficiency. Animal behavior is an interest of mine, and is essential to study, so that we can create lucrative, humane, and efficient animal husbandry systems. My project also regards the possibility of reducing the effects of global warming through grass-fed cattle. This topic is important to me, as carbon emissions are a huge problem, but we sometimes generalize and look at all cattle in the same light. I hope that through this project, I can help to raise awareness of the differences between feedlot and grass-fed cattle, and the huge potential that these cattle have for our planet.

#### Awards

#### Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	
Challenge Award - Resources - Intermediate Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$2 000</b>