

## CWSF 2008 - Ottawa, Ontario



### Cayley Linehan

#### **Cones and Clones: Genetic Variation of White Spruce Seed and Clones**

**Division:** Biotechnology / None

**Category:** Senior

**Region:** Central Newfoundland

**City:** Grand Falls-Windsor, NL

**School:** Exploits Valley High

**Abstract:** Analysis of white spruce cone and seed traits from samples collected within Newfoundland's seed orchard over a two year period revealed strong genetic variation between and within families and illustrated the importance of sampling biological systems over time. Understanding these differences will aid in selecting candidates for advanced breeding and insure research studies are designed correctly. Maternal control was apparent over all characteristics including fertilization.

#### Biography

I'm a grade 11 student at Exploits Valley High in Grand Falls-Windsor, Newfoundland. I also spend lots of my time playing sports, my preference being softball, karate and swimming. In school my favorite subjects are chemistry and english. I am also active in my school's senior basketball team, relay for life team choir and band in which I play flute. I have recently taken up public speaking and have competed and placed provincially. I attended my first Canada Wide Science Fair in 2004 when I was in grade 7 and have gone every year since and loved it!