

# CWSF 2012 - Charlottetown, Prince Edward Island



## Kiri Daust

### Measuring Melodies: Does Pattern Predict Preference?

**Challenge:** Discovery

**Category:** Intermediate

**Region:** Pacific Northwest

**City:** Telkwa, BC

**School:**

**Abstract:** I wanted to see if compression software could measure musical complexity and if complexity correlated with music preference. I found that audio compressors do not measure complexity but text compressors do. I compared compressed music to recording counts and found there were more recordings for pieces that compressed an intermediate amount.

#### Biography

I love music and science, and this year, I've combined the two for my project. I've participated in the Smithers science fair for seven years now, and each year it's exciting. The last two CWSFs were amazing! I think that science should be used to understand nature and the world around us. I play the violin, and love classical music, especially Bach. I also play in fiddle in Klezmer groups. I often use music as a way of expressing myself, and I enjoy improvising and composing. I lived the first eight years of my life in a 300 square foot log cabin on François lake two hours from town, with no running water or electricity. We now have a part time home nearer to town, but we still go to François lake, and I love living in nature. I plan to home school until university, and take either music or science. I would like to be a scientist who works out of home for a career, and also play in an orchestra and some bands. I love animals, and I think that it would be cool to have a farm.

#### Awards

#### Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$1 300</b>