

# CWSF 2012 - Charlottetown, Prince Edward Island



## Keltie Murdoch

### GeoAir

**Challenge:** Innovation

**Category:** Senior

**Region:** East Kootenay

**City:** Cranbrook, BC

**School:** Mount Baker Secondary

**Abstract:** This project demonstrates the use of data personally collected from on-site experimentation to create a theoretical geothermal heating and cooling system model. This system uses underground pipes and small fans to increase the annual efficiency of an air-to-air heat pump in an environmentally friendly and cost effective manner.

### Biography

My name is Keltie Murdoch. I have various interests including music, sports, and of course, science. I play clarinet in my high school's concert band, as well as sing in the concert choir. I also enjoy playing piano on my own time. During the spring and fall, I am a soccer player, and referee. I participate on the high school team, as well as the regional house team. Finally, I have an interest in engineering sciences and design. I hope to pursue a career in a science or engineering related field once I graduate.

### Awards

### Value

CSSE Engineering Innovation Award - Senior Sponsor: Canadian Society for Senior Engineers	\$1 000
Renewable Energy Award - Senior Sponsor: Ontario Power Generation	\$1 000
<b>Total</b>	<b>\$2 000</b>