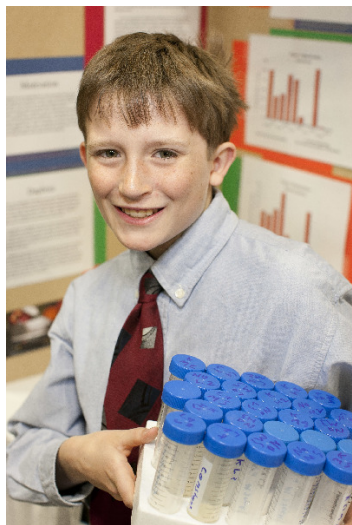


## CWSF 2011 - Toronto, Ontario



### Laurence Emery

#### Eco Friendly Road Salt? What Do Daphnia Say?

**Challenge:** Environment

**Category:** Junior

**Region:** Peterborough

**City:** Peterborough, ON

**School:** Queen Mary P.S.

**Abstract:** The volume of road salt Ontario uses is questionable. Most of it ends up in lakes and rivers. My experiment used a water invertebrate called daphnia. I added three salts at three concentrations into their water, NaCl, CaCl<sub>2</sub> and KCl. The least harmful in terms of reproduction and death rates was NaCl, CaCl<sub>2</sub> had the worst reproduction rates and KCl had the worst death rates.

#### Biography

I'm Laurence Emery a grade 7 student at Queen Mary PS in Peterborough, Ontario. The first Regional SF I entered was in grade 2 with a project called, "The Eggsperiment." It wasn't a prize winner but the rewarding experience encouraged me to participate each consecutive year. I have interests in various disciplines of science which are reflected in the projects I have done, they include: physics, mechanical applications, human physiology, chemistry and now environmental studies. As I progressed and saw the older students' projects I hoped I could present a high quality experiment that would send me to the CWSF. This is the first year I'm eligible and already my dream has come true! At school I volunteer at the library and make the daily announcements, my riddle of the week is very popular. I also compete on the Track Team and tend to our award-winning butterfly garden. At home I build model airplanes and I'm passionate about fish. I am the neighborhood expert on aquariums. For years I have participated in the Canadian cross country skiing program. I'm also a Scout, figure skater, Kids triathlon participant and an avid canoe tripper. I hope for an amazing experience this year.

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	\$300
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
<b>Total</b>	<b>\$1 300</b>