

## CWSF 2011 - Toronto, Ontario



### Laura Dunne-Mucklow

#### Frost-Free Flight

**Challenge:** Innovation

**Category:** Junior

**Region:** Frontenac, Lennox & Addington

**City:** Kingston, ON

**School:** Calvin Park P.S.

**Abstract:** When planes fly, they get ice on their wings, and using antifreeze to get it off is bad for the environment. I created an airplane wing design that flexes to break off the ice. To test my innovation, I made a model and froze ice on it. It cracked off on the third model.

#### Biography

I was born June 25, 1998 in Kingston, Ontario. I am twelve years old, and I live with my fifteen-year-old brother, Sam, and my mom and dad in Kingston, Ontario. I went to Polson Park Public School for eight years, and I currently attend Calvin Park Public School in the Challenge Program. I am in grade seven. I take fiddle, violin and Ottawa Valley stepdance lessons. I've played the fiddle since I was six years old. Sometimes I play music with my dad at a pub downtown. Last year I went to Costa Rica with my mom for two weeks. We went ziplining down mountains, rafting down rivers full of crocodiles, climbing volcanoes, horseback riding along the continental divide, and night-hiking in the jungle. Last year, at the Frontenac Lennox and Addington Science Fair, I won a silver medal in the primary computing and engineering division for my project on developing a cordless, electric hovercraft.