

## CWSF 2014 - Windsor, Ontario



### Madeleine MacDonald

#### Alpaca Power: Environmentally Friendly

**Challenge:** Environment

**Category:** Junior

**Region:** Annapolis Valley

**City:** Cambridge, NS

**School:** Berwick and District School

**Abstract:** My theory is that alpaca manure tea repels deer without harming the environment. I made a manure tea and conducted three experiments: testing the manure teas' pH for adverse effects; growing pole beans using manure teas, and determining if deer would cross an alpaca manure and tea barrier. My results to date indicate alpaca manure tea repels deer, helps germination, and doesn't harm plant life.

#### Biography

I am a grade eight French Immersion honors student from Berwick and District School, in Nova Scotia. I currently serve as a class representative as well as, the school government's secretary. I am an active participant of my school's Me to We group, and organized our Thank-you to the Teachers assembly, and part of the We are Silent initiative. I volunteer with the Free Spirit Therapeutic Riding Association for individuals with exceptionalities. I play as a flutist with the Nova Scotia Junior Wind Ensemble. I'm also working towards my bronze medallion in the Duke of Edinburgh Program. Some of the awards I've received this year are the AVRSB: Best Project at the Fair and Environment trophies, 1st place Clean Annapolis River Project Award, Dalhousie Faculty of Agriculture Award, 2 gold medals, and the Paul Bethune Memorial Science Award. My favorite subjects in school are Science and French. When I graduate, my goal is to become a veterinarian. I love anything to do with animals. My hobbies include: reading, playing the flute, drawing, several sports such as yoga, and javelin. I am ecstatic to go to Nationals to participate in such an exceptional event where everyone shares my love of science.

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100