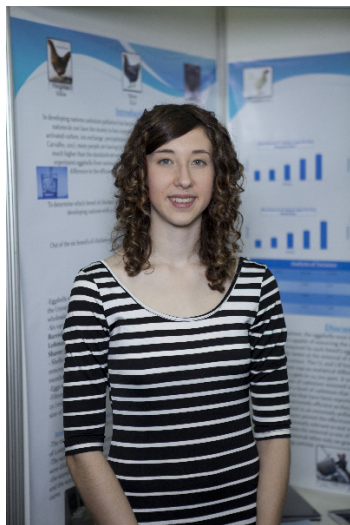


# CWSF 2013 - Lethbridge, Alberta



## Hannah Landry

### Eggshells: Simple, Practical, Cost Efficient Remedy to Address Cadmium Pollution

**Challenge:** Environment

**Category:** Senior

**Region:** Chignecto West

**City:** Elmsdale, NS

**School:** Hants East Rural High School

**Abstract:** The goal of the study was to discover a low cost, viable water filtration system for developing nations. The study examined the efficiency of eggshells from 6 breeds of chickens in their ability to remove cadmium from drinking/waste water. Results indicated all breeds showed they had the capacity to remove this heavy metal; however the Hungarian Yellow was determined to be the most efficient.

#### Biography

I am a grade 12 student at Hants East Rural High, in Milford, Nova Scotia. Next year I am attending the University of Ottawa, where I will take the Bio-medical Sciences program, in preparation for medical school. I am an avid volunteer within my community and province, I have started my own organization called Youth Who Care, a forum connecting youth with volunteer opportunities in the community. I paired my passion for helping others along with my passion for science to come up with my project, I designed a filtration system made up entirely of eggshell waste for those in developing nations to safely and cheaply remove cadmium from their drinking water. I hope to further my research by determining if eggshells remove other heavy metals as well as cadmium. You really have to put your heart and soul into these projects if you want to be successful, it takes up a lot of time and you have to like what you're doing for the passion to shine through to the judges.

#### Awards

#### Value

Canadian Stockholm Junior Water Prize Sponsor: Canadian WEF Member Associations, the Canadian Water and Wastewater Association, and Jacobs	\$2 000
Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada	\$100
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$4 100</b>