

CWSF 2007 - Truro, Nova Scotia



Stephanie Gallant

Mussels: Pollution Solution?

Division: Physical & Mathematical Sciences / None

Category: Junior

Region: Eastern Newfoundland

City: Mount Pearl, NL

School: St. Peter's Jr. H.S.

Abstract: This experiment tested to see if blue mussel shells, *Mytilus edulis*, could absorb harmful chemicals and bacteria from polluted water. Mussel shells were added to water samples, which were tested over 4 weeks for pH, dissolved oxygen and TDS. Metal and non-metal testing showed a decrease in manganese in freshwater, confirmed later by laser ablation tests showing that mussel shells absorb both manganese and copper.

Biography

I'm 13 years old and I attend St. Peter's Jr. High in Newfoundland, Canada. I enjoy listening to music, playing guitar, piano and saxophone, reading and spending time with my friends. In school, I am involved in the concert band, guitar ensemble and art club. Although I have not decided, some future career plans I am considering are forensic scientist, forensic anthropologist or medical examiner. Every couple of years my family and I travel to Portugal, as my mom is Portuguese.

Awards

Value

The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Life Sciences - Junior Sponsor: Pfizer Canada	\$700
Total	\$2 200

