



## CWSF 2011 - Toronto, Ontario



## **Derek Churchill**

## **Busy Biomonitors**

Challenge: Environment

Category: Junior
Region: Windsor
City: Windsor, ON
School: Talbot Trail P.S.

Abstract: Chemical analyses were performed on water samples from three river sites

within the Detroit River watershed. Daphnia magna was used as a biological monitor. Acute, chronic, and reproductive tests were done with the Daphnia to study the effects of the contaminants on their survival and fecundity. Daphnia proved to be an effective biomonitor, indicating water

quality problems in Turkey Creek, and the Grand Marais Drain.

## **Biography**

My name is Derek Churchill and I attend Talbot Trail Public School in Windsor, Ontario. I am in grade eight and I have been attending this school for five years. I am involved in many school activities such as long distance running, track and field, the chess team, and the school band. My favourite subjects are science, math, geography, and history. I enjoy music very much; I play the piano and the clarinet. My interests include spending time with family and friends, swimming, karate, and video games. I love science and participated in the Windsor Regional Science Fair in grade seven where I was successful. I received a gold medal, and two engineering awards for my project. This year I decided to do a project that focuses on the environment. It will be my first time at the Canada Wide Science Fair.

Awards	Value
Excellence Award - Junior - Silver Medal	\$700
Sponsor: Youth Science Canada	
The University of Western Ontario Scholarship	\$2 000
Silver Medallist - \$2000 Entrance Scholarship	
Sponsor: University of Western Ontario	
Total	\$2 700



