

# CWSF 2010 - Peterborough, Ontario



## Adam Noble

### Euglena as an Indicator of Water Quality

**Division:** Health Sciences

**Category:** Intermediate

**Region:** Peterborough

**City:** Lakefield, ON

**School:** Lakefield District Secondary & Intermediate

**Abstract:** Water samples were taken from six sites along the lower Trent Severn System in Ontario. Euglena were added to the samples and chlorophyll concentration was determined to assess Euglena growth. Phosphorous levels were measured in the samples. Chlorophyll concentration and phosphorous levels increased from north to south. Reduced levels of chlorophyll were observed at Lakefield Dam. Euglena is a possible indicator organism of water quality.

### Biography

I am a grade 10 student at Lakefield District Secondary School in Lakefield, Ontario. I enjoy all of the subjects I take at school, but science and math are my favourites. Apart from being on the Honour Roll, I participate on many school sports teams. This year I was on the cross country running, Nordic skiing, badminton, track and rugby teams. I won three gold medals at COSSA and a bronze at OFSSA for Nordic skiing this year. I also raced Nordic at the provincial level. I ran provincially with the Quinte Legion cross country team and we won the provincial silver medal. I live on a lake that is part of the Trent Severn Canal System. I spend a lot of time out on the lake and I am concerned that I am observing less wildlife every year. I am interested in a career in science, possibly in the medical field. I think the Science Fair has allowed me to learn more about scientific research and to develop my public speaking skills.

### Awards

### Value

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Earth & Environmental Sciences - Intermediate Sponsor: Suncor Energy Inc.	\$300
Total	\$1 300

