CWSF 2013 - Lethbridge, Alberta

Graham Bohm

Evading Erosion: Which Plants Are Effective at Controlling Shoreline Erosion?

Challenge: Environment
Category: Junior
Region: Bay Area
City: Dundas, ON
School: St. Augustine E.S.

Abstract: A model river was created to determine which plants would prevent shoreline erosion. Three flow rates representing baseline flow and the increased river flow after typical and extreme rain events were examined. At high flow, soil alone lost 85% by mass, cattails 31%, grasses 18% and shrubs 8%. This demonstrates that riverbanks without vegetation would experience over ten times the erosion than riverbanks with shrubs.

Biography

I am in grade eight at St. Augustine's in Dundas, Ontario. I really enjoy playing waterpolo and I'm on the Hamilton Under 14 competitive team. I take piano lessons and am trying to teach myself to play the drums. I also enjoy playing chess, I have won our school tournament for six years and compete each year at the city level. I love to spend my summers at our family cottage on the shore of Lake Huron in Tobermory, Ontario. I chose the topic for my project because I care about our environment and I am concerned about the impacts of climate change. All of the talk last fall about Hurricane Sandy and the damage it caused made me wonder what types of effects we would see in the Great Lakes Region if climate change continues to increse the intensity of storms. I would highly recommend doing a science fair project to anyone because, although it takes a lot of hard work, it is interesting to watch an experiment progress, and when you finally find your results it is very exciting. Last year I really enjoyed the Canada-Wide Science Fair in Charlottetown and I am excited to participate once again.

Awards	Value
Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	$100
Western University Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: Western University	$1 000
Total	$1 100