

CWSF 2015 - Fredericton, New Brunswick



Holly Tetzlaff

Small But Mighty-The Environmental Impact of Microbeads

Challenge: Environment

Category: Intermediate

Region: Quinte

City: Trenton, ON

School: East Northumberland S.S.

Abstract: Plastic and non-plastic microbeads, in personal care products, were extracted and using controlled trials tested and compared for disintegration, smear-ability, flotation and effect of friction. Subsequently, drains, water samples, wastewater filters, a human mouth and fish entrails were examined for evidence of microbead particles, with similar characteristics. Concluded findings show that both microbeads do not disintegrate and pass through drains, into sewer and septic systems.

Biography

Hi, my name is Holly Tetzlaff, I am a proud Blue Dragon at East Northumberland Secondary School (ENSS). I am excited that ENSS is closing in on raising \$1 million dollars for the Terry Fox Foundation and I look forward to it happening while I am attending the school. I enjoy participating in many school sports like, cross country, volleyball, track and soccer. Outside of school I fence for the Loyalist Fencing Club and play soccer for the Quinte West Wolverines. I enjoy spending time with family, friends and travelling. In school I like Drama, Business, Math and Science. I also like public speaking and look forward to being on Team Quinte for the second time, at the CWSF. I like doing my science fair projects on real world problems and that is how I found my inspiration to tackle microbeads this year. Doing research from my project I came across a quote by Dr. Marcus Eriksen, "Science without solutions is only doing half its job." This inspires me to take the knowledge gained from my science fair projects, share my findings and therefore help do the other half of the job, communication, which helps protect our environment.

Awards

Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 000