



CWSF 2017 - Regina, Saskatchewan



Biography

My name is Nattan Telmer, I am a grade eight student at Arbutus Global Middle School in Victoria, BC. I speak English, French, and Portuguese. I speak Portuguese because part of my family is from Brazil where I was born. I go there every year and live in a rural fisherman's village on the north eastern coast where there are beaches and coral reefs and manatees. I play competitive soccer, racket sports, ski in BC's amazing mountains, sail with the racing team in Victoria, and of course surf and skim board in Brazil's warm waters. Brazil is where I first learned to love the outdoors and sports and where I became incredibly curious about nature and science, including about how to generate electricity because the power there often fails. I have won several awards in different competitions including in music and creative endeavors in and outside of school. I have participated in science and math fairs since grade four. I was very happy to win first overall in the science fair this year and love the topic of electricity.

Nattan Telmer

Powering Animal Trackers With Thermal Electric Generators (TEGs)

Challenge:	Innovation
Category:	Intermediate
Region:	Vancouver Island
City:	Victoria, BC
School:	Arbutus Middle School
Abstract:	This project uses thermal electric generator (TEG) technology to extend the operational life of tracking sensors that provide key information about sea lion life history, which is needed for conservation efforts. The TEGs exploit the temperature differential between a sea lion's body and the surrounding air or water to generate sufficient electricity to operate the sensors indefinitely.

Awards	Value
S.M. Blair Family Foundation Award - Intermediate	\$750
Sponsor: S.M. Blair Family Foundation	
Youth Can Innovate Awards - Intermediate	\$750
Sponsor: The Gwyn Morgan and Patricia Trottier Foundation	
Excellence Award - Intermediate - Silver Medal	
Sponsor: Youth Science Canada	
Western University Scholarship	\$2 000
Silver Medallist - \$2000 Entrance Scholarship	
Sponsor: Western University	
Total	\$3 500



Youth Science Canada PO Box 297 Pickering ON L1V 2R4 www.youthscience.ca / info@youthscience.ca 416-341-0040

