

## CWSF 2014 - Windsor, Ontario



### David Hooper

#### On The Mark

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Cape Breton

**City:** Howie Centre, NS

**School:** Riverview High School

**Abstract:** The participant statistically evaluated the effect of changing the variables controlling a specific process on the accuracy and precision of that process. To achieve this objective, he designed and constructed a catapult then tested it under eighteen sets of operating conditions achieved by varying the shot firing force, adjusting the projectile release angle and firing using both mechanically triggered and manually released shooting methods.

#### Biography

I am a grade 10 student at Riverview High School in Coxheath NS, where I play on the Varsity soccer team. Outside of school, I play hockey in the winter months for the Cape Breton County Minor Hockey Association as a defenceman. In the summer I play for the Cape Breton Selects Tier I soccer team as a fullback, play recreational tennis and hang out at my family's bungalow the rest of the time. I am a past medalist in our Regional Science Fair where I won a silver medal in the Junior division for my project on the analysis of tennis racquet vibration dampeners, a project inspired by my sports involvement.

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