

## CWSF 2016 - Montreal, Quebec



### Stephanie Lacasse

#### The Green Way: Making Use of Waste

**Challenge:** Environment

**Category:** Intermediate

**Region:** Northern Vancouver Island

**City:** Pt Mc Neill, BC

**School:** North Island Secondary

**Abstract:** To test productivity two experiment chambers were treated with varied weakly additions of 5 and 10 ml's of fertilizer. Weekly samples were collected, filtered, and analyzed for chlorophyll "a". In future use the data collected could be used to design a closed fish production facility.

#### Biography

My name is Stephanie Lacasse, I am a grade 9 student attending North Island Secondary School in Port Mc Neill, BC. I love to scuba dive, downhill ski, hike, swim and I recently learned how to kite board. I have been involved with Girl Guides of Canada for 11 years and have completed my Lady Baden Powell and Citizenship award. I regularly volunteer at fish hatcheries and my parents do impact assessments for fish farms. This inspired me to do a project on utilizing fish waste. This year my science fair project is about studying algae so in future use I could make a fish chemostat. A fish chemostat is basically a life sustaining eco-system where fish would use their own waste as fertilizer to grow algae and then the algae is used as food for the fish. For non eating algae fish I could add another step and use the algae to grow a type of plankton called daphnia. They would then be used to feed fish. Advice that I would give to a student thinking about doing this project is start very early because this project took more time than I expected.