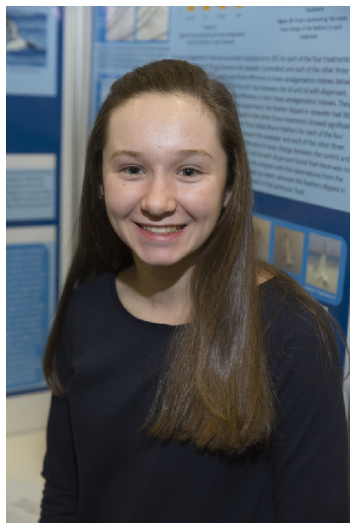


CWSF 2016 - Montreal, Quebec



Caitlyn Pratt

Impact of an Oil Spill and Emergency Response on Thick-billed Murre Feathers

Challenge: Environment

Category: Senior

Region: Eastern Newfoundland

City: St. John's, NL

School: Holy Heart High School

Abstract: My experiment determined if exposure to an offshore oil incident and emergency response would impact a Thick-billed Murre's feather microstructure and mass. I found that dispersants are harmful to the waterproofing of their feathers, however necessary for mitigating an oil spill. These results add to the conversation regarding the safe use of spill-treating agents in light of the changing legalities on dispersant usage.

Biography

I am an 11th grade IB student from Holy Heart of Mary High School in St. John's, Newfoundland. Born in Windsor, England, I have traveled the globe with my parents and lived also in Jakarta, Indonesia and Houston, Texas. An honor student, I won a gold medal at the Regional Newfoundland Science Fair in 2015. A competitive swimmer since age five, I am the Newfoundland Provincial Record Holder in the 50 Breaststroke and hope to swim at university. My future goals include studying biology in university and ultimately attending medical school. While living in Houston, I witnessed the devastating effects of the BP Macondo oil spill on the coastal waters, beaches, and wildlife of the Gulf Coast. My project looks at the effects of oil and oil dispersants on one particular species of Newfoundland birds. For an extension of my experiment, I want to look at the degradation of dispersants compared to oil to determine if, long term, Canada should allow spill treating agents. Advice to Future Students: Start your project early! Choose something you're really interested in because that makes the "digging" in more fun.

Awards

Value

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| Canadian Stockholm Junior Water Prize - Senior Sponsor: Canadian WEF Member Associations, the Canadian Water and Wastewater Association, and Jacobs | \$2 000 |
| Excellence Award - Senior - Bronze Medal Sponsor: Youth Science Canada | |
| University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa | \$1 000 |
| Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University | \$1 000 |
| Total | \$4 000 |