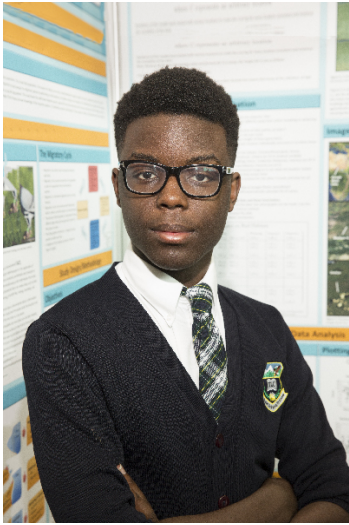


CWSF 2019 - Fredericton, New Brunswick



Raphael Kelly

Utilizing GIS and Data Analysis to Assess Human Impact on Migratory Bird Species

Challenge: Environment

Category: Intermediate

Region: Calgary Youth

City: Calgary, AB

School: Fairview Junior High School

Abstract: A mathematical way to categorize a location's land use and assign a human impact value to it was developed. Using this, the migratory locations of 30 individuals from 6 bird species were analyzed for a total of 420 data points. Through data analysis, this data was used to identify the level of human impact on the habitats of these migratory species and identify conservation points.

Biography

My name is Raphael and I am a 14-year-old grade 9 student from Fairview school. I am a math lover who has a love for philosophy and learning. I am currently taking the mathematics 10C course at my school. I am excited to start taking pre-IB courses next year so as to deepen my knowledge in all subject areas. Aside from academics, I am also a basketball player and enjoy football and track and field. In my free time, I like to solve math problems, read books, and make music. In the short term, I hope to learn more about data science, theoretical ecology, discrete and applied mathematics, and music theory. For the long term, I see my career path as being that of an entrepreneur however, I also want to deepen my understanding of all areas of knowledge, especially math, and be involved in academia and research. Although I have a wide variety of interests, they are all connected through the theory of knowledge, the pursuit of excellence, the value of creativity, and a belief in the importance of authentic humanity. This is the mentality I have with all my endeavours.

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