

ESPC 2016 - Montreal (Québec)



Patrick Geertz

The Effect of Dissolved Oxygen and pH on Wetland Aquatic Invertebrate Diversity

Défi: Environnement

Catégorie: Junior

Région: Central Okanagan

Ville: Summerland, BC

École: Summerland Middle School

Sommaire: This experiment demonstrated that increasing human impacts negatively affect wetland health as demonstrated by decreasing aquatic invertebrate diversity ($R^2=0.9$). Except for the wetland impacted by cattle, the effect of dissolved oxygen and pH on invertebrate diversity over the five tested wetlands proved insignificant ($p = 0.1$). More investigation is needed to determine other factors affecting wetland health.

Biographie

My name is Patrick Geertz and I am in 7th grade in Summerland, BC. I like wildlife photography, my farm and playing basketball and baseball. I have been awarded a prize from the Summerland Climate Action Committee for my school vermicomposting project. I was also awarded the best Pee wee Rep hockey player of the year. When I grow up I would like to become a wildlife vet or a wildlife biologist. I want to give a voice to animals and the ecosystems where they live. The inspiration for this project was the many healthy, wild wetlands on my property. Poking around and looking at all the bugs and tadpoles, I always wondered what made them healthy. I plan to further investigate this concept of 'health' by studying the role of riparian vegetation in invertebrate diversity. The advice I would give to other students is to get as many tests as possible, learn the concepts of standard deviation and beef up your bibliography to support your work. I would also recommend finding a good mentor that can help you think about and look for things that you wouldn't normally look for.

Prix

Valeur

Prix des 4-H du Canada ? Agriculture durable Commanditaire: 4-H du Canada	500,00 \$
Prix d'excellence - Junior - Médaille d'argent Commanditaire: Sciences jeunesse Canada	
Bourse d'études de Western University Médaille d'argent - Bourse d'admission de 2 000 \$ Commanditaire: Université Western	2 000,00 \$
Total	2 500,00 \$