

CWSF 2011 - Toronto, Ontario



Josie Mielhausen

Phyto Filter

Challenge: Innovation

Category: Intermediate

Region: Bluewater

City: Lion's Head, ON

School: Bruce Peninsula District S.S. & E.S.

Abstract: Water quality impairment due to nutrient enrichment from agricultural activities is a worldwide concern. Phytoremediation technology using aquatic plants is increasingly applied to remediate eutrophic waters. Native and non-native aquatic plant species were tested as potential phyto-removal agents for Phosphates. An aquatic plant containment system was developed and evaluated for ease of construction, deployment, maneuverability, and removal. Questionnaires were used to determine nutrient management strategies.

Biography

My name is Josie Mielhausen and I am a grade 10 student at Bruce Peninsula District School. I live in Lion's Head Ontario, which is part of the Niagara Escarpment surrounded by the waters of Georgian Bay and Lake Huron. I live with my family on a beef farm. I represent my school by competing in cross-country running, badminton, golf, volleyball, tennis and Science and Technology fairs. This is my fourth Canada-Wide Science Fair competition.

Awards

Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	\$700
The University of Western Ontario Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
Total	\$2 700