

## CWSF 2006 - Saguenay, Québec



### Gillian Haugen-Koechl

#### Pine Beetle Blues

**Division:** Engineering & Computing Sciences

**Category:** Junior

**Region:** Northern British Columbia

**City:** Charlie Lake, BC

**School:** Bert Bowes Jr Secondary

**Abstract:** Can pine needle decoction tell the health of the tree? Last year I learned pine needle decoctions kill bacteria. This year I tested decoctions from pine exposed to mountain pine beetle. I collected samples of healthy, stressed and dead trees. I tested decoctions pH level and ability to fight bacteria.

Awards	Value
Pulp & Paper Technical Association of Canada Award Sponsor: Pulp & Paper Technical Association of Canada	\$500
Honourable Mention - Earth & Environmental Science - Junior Sponsor: Petro-Canada	\$100
Total	\$600