

Why Care about Food Waste?

Engaging middle school students on a pivotal issue



Photos provided by Miranda Wolf and Jan DeWaters



By **Jan DeWaters** and **Miranda Wolf**

WHILE OUR EFFORTS TO ENGAGE students in environmental stewardship tend to focus on hot-button topics like renewable energy, recycling, conserving water, turning off lights, and keeping harmful pollutants out of the environment, the environmental, social, and economic impacts related to food waste are generally unrecognized and largely underappreciated. Few people realize that one-third of the food produced globally ends up uneaten.¹ Along with all that wasted food is the wasted farmland, water, labour, and energy resources required to grow, process, package, and transport it. Disposal of that wasted food ultimately uses valuable landfill space and contributes to global greenhouse gas emissions.

Food is wasted throughout the entire food supply chain, from production through delivery to consumption. Reducing the quantities of wasted food, as well as the negative impacts of its disposal, will require huge changes not just in our food systems but also in how we as individuals obtain the foods we eat and manage our own food waste. Long-term behavioural change originates in early experience; thus, teaching

students about problems related to food waste, and helping them explore ways to reduce the negative impacts of wasting food, will empower them with awareness and understanding that can be the first steps toward change.

In this article we introduce the many problems surrounding food waste and share some activities for middle school students, that can be adapted for almost any age group.

A big problem

The amount of food discarded globally is staggering. Approximately 1.3 billion tons, costing over \$1 trillion dollars per year and consuming 24% of the world's fresh water and 23% of the world's cropland.^{2,3} Most of this food waste ends up in landfills — close to 60% in the US and Canada, where it comprises, by far, the largest single fraction of municipal solid waste.³ Food waste is also a significant contributor to climate change, largely by producing methane gas as it decomposes. Overall, food waste accounts for 8% of the total human-caused greenhouse gas emissions worldwide.¹ In fact, if food waste were a country, it would rank third in greenhouse gas emissions, behind China and the U.S.³