





# Objectives

- Give you the information and tools you need to successfully compost
- II. Highlight the benefits and bust the myths

III. Ensure you understand the program

commitment







## What is composting?

#### Recycling organic materials:

- In nature organics decompose into humus
- · Copy this process with kitchen & yard waste
- Decomposition is just breaking down material so it can be used again





## Why compost?

## Improves yard and garden:

- Soil amendment improves plant growth
- Reduces need for fertilizers and herbicides
- Releases nutrients slowly
- You know what's in it
- Safe for children and pets
- Free!





## Why compost?

#### Helps conserve and protect water:

- Reduces the need to water
- Keeps rivers and creeks healthier
- Decreases erosion and run-off





## Why compost?

#### Helps the environment:

- Reduce GHG emissions
- Goal: reduce residential waste to landfill 35% by 2023
- Recycles organic waste back to the earth
- Decrease strain on waste and wastewater systems (garburator use)

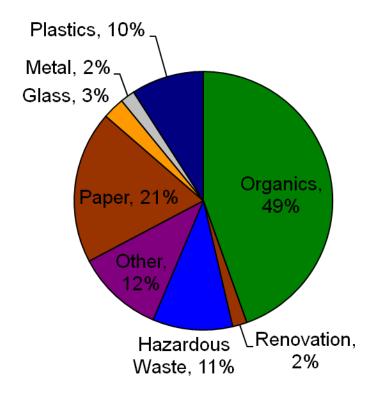








## Residential Waste Disposal (2002) (Source: NRCAN 2006)



In 2014 Alberta households landfilled **1.23 billion kg** of garbage.

The average Albertan disposed **299 kg** of residential waste.



## Myths about composting

#### I have no use for finished compost.

FALSE: excellent slow-release soil amendment for lawns, trees and shrubs.

#### Composting takes a lot of time and effort.

FALSE: takes only 15 minutes a week.

#### Composting is smelly, messy and will attract pests.

FALSE: proper compost techniques will eliminate these issues.

#### I don't have enough organic waste to bother.

FALSE: organics are one-third to one-half of household waste.

## Placement & Assembly

- ☐ Accessible in winter
- ☐ Sunny convenient spot
- □ Level and well drained
- ☐ Space 71cm (w&l), 81 (h)
- On soil, grass, concrete, gravel; not wood or vinyl
- ☐ On your property
- Not stinky
- □ Can be moved
- ☐ Call if you need help







# Compost Ingredients



Water



Soil



**Browns** 



**Greens** 













# Greens (nitrogen)

Garden waste
Green leaves
Houseplant waste
Fruit & veg scraps
Coffee grounds
Tea & bags
Eggshells









# Browns (carbon)

\*Fallen leaves \*
Coffee filters

Paper egg cartons/drink holders

Packing paper

Paper bags

Plain cardboard

Newspaper

Toilet paper tubes











Meat/bones/Fish Dairy

Oils

Pet waste

Toxic materials

Diseased plants

Weeds

Evergreens Rhubarb leaves

\_ . . .

Treated wood

Sod











## Compost Recipe: how to start



Shovel of soil (once)
Bucket of greens

Wet the pile

10 cm browns

5 cm of twigs









#### How to continue

Continue adding

2 parts brown on 1 part green

#### Add moisture

Form a ball or damp as a wrung out sponge

#### **Aerate**

To speed the process & eliminate odors





Even though you are aerating, finished compost will migrate to the bottom.



#### Activities:

- 1. Build your own compost pile
- 2. See a working composter





# What's happening?

- Microbes are working
- Generate heat
- Enough heat will kill pathogens/weeds







# MALL FOOD WASTE BAG 100% PAPER 100% PAPER 100% PAPER WASTE HELP THE ELITIN HELP TISELF USE THIS BAG FOR KITCHEN ORGANIC WASTE - Patiented factor resistants natured flow the control flow to be control flow to be

# Compost all year

- Autumn: harvest; store leaves; aerate & water well before freeze
- Winter: keep adding 2 browns on 1 green; decomposition will slow/stop
- Spring: aerate, water/browns, soil, harvest



## When is it ready?

- Open the side door
- Look and feel like topsoil: dark, crumbly
- Smell earthy
- Can't identify original material



- Not hot
- Bag test



#### **How do I harvest?**

Open door and dig out of the bottom

Can screen it





## How do I use my compost?

- Dig into vegetable or flower beds
- Planting: mix 1/3 compost with 2/3 soil
- Place around root zone of trees and

shrubs

- Top dress lawn
- Mulch perennial beds
- Compost tea



# **Troubleshooting**

Symptom	Problem	Solution
Pests	<ul> <li>Flies like fruit</li> <li>Mice, wasps &amp; ants like dry piles</li> <li>Magpies, dogs &amp; skunks like animal products</li> </ul>	-Cover greens in browns or bury -Keep pile moist -Do not add meat, grains, cooked food
Not heating up	Lack moisture or greens	Add moisture and/or greens

# **Troubleshooting**

Symptom	Problem	Solution
Smells like rotten eggs	-Compaction or not enough air -Too much moisture	Aerate and add browns
Smells like ammonia	Too many greens	Aerate and add browns
Process is slow	-Not enough water -Not enough surface area	-Add water -Make pieces smaller; nothing whole

## **Troubleshooting**



Letting your composter go wild:

1.Bylaw officer will investigate complaint

- 2. If complaint is found valid:
  - a. warned first by letter
  - b. fines starting at \$200
  - c. The City could clean it up and bill you



Q. I have fruit flies in my kitchen catcher. If I put this in my composter will I have a fruit fly issue? Or should I just throw out the kitchen catcher items in the garbage?

A. Fruit flies in the composter aren't a problem. Take your kitchen catcher out regularly.

## Q. I have ants in my composter. Help!

A. Your compost is too dry. Nothing unwanted will live there if it's properly damp. Add water, being sure to reach sides and corners, and mix well to ensure it is damp throughout.



Q. Can larger fruit seeds go in, i.e. peach pits, cherry pits, etc.?

A. Large fruit seeds like cherry and peach pits can go in the composter, but will take a very long time to break down. Put them in the garbage.



Q. The brochure from AB Environment says put a shovel of dirt on every layer and that dried grass is a brown. Why is this different?

A. Dirt: don't need it and takes up space

A. Grass: low carbon ratio and can compost in yard waste



## How to get help

403-342-8750

environmental.initiatives@reddeer.ca

www.reddeer.ca/composting

- Videos
- How-to



## Program: what you get

#### **Training**

- Workshop
- Reference material: brochure from AB Environment, kitchen catcher prompt sticker, composting at a glance, <u>www.reddeer.ca/composting</u>
- Ongoing support

#### Tools

- Composter, kitchen catcher, Wing-digger





#### Your commitment

- Contract: review, signed copy for tools
- Live in the city of Red Deer
- Not composting but want to learn
- Commit until June 2017 including winter
- Keep in touch: emails, newsletters, visit
- Exit survey in June 2017 and photos



