Agenda

• Why Compost?
• Worm Basics
  – Worm Info
  – What to feed
  – What NOT to feed
  – Where to keep them
  – How to harvest
  – Worm Bin Maintenance
• Build the Bins
• Questions
Why Compost?

• 251 million tons of trash is thrown out in the United States each year
• About 15% of that amount is food waste
• Only about 2% of food waste is composted
• Worm castings are one of nature’s best soil amendments
• Worms are easy to take care of
• Worm bins can fit in even the smallest living spaces
Worm Basics

• These worms are designed by nature to compost
• They are very different than you typical “earthworm”
• Red Wigglers live near the surface
• They like are social worms that like to live near each other
• They never sleep
• In ideal conditions they can double their population every 90 days and eat their body weight in waste every 3-4 days
• They are light-phobic
• Ideal temperature is around 77F. Will be productive when 50F-85F. Will usually survive in 40F-90F
Worm Basics (cont.)

- Worms need moisture since they are made up mostly of water
- You should be able to squeeze bedding material and see some water drip out
- Worms need “grit” to digest
- Worms don’t have teeth, so break things up for them if it's convenient for you
- Red Wigglers have 5 hearts
- Typically won’t survive if you cut them in half
Worm Anatomy

- Male reproductive organs
- Cerebral ganglia
- Mouth
- Pharynx
- Ventral blood vessel
- Segmental blood vessel
- Segmental ganglion
- Segmental nerves
- Clitellum
- Dorsal blood vessel
- Intestine
- Gizzard
- Female reproductive organs
- Hearts
- Crop
How Worms Are Made

- Ovary and testis area
- Clitellum
- Clitella
- Ovaries and testes
- Formation of cocoon
- "1/8"
What a Cocoon Looks Like
What to Feed

- Vegetable Waste
- Fruit Waste
- Breads, grains, cereals
- Paper
- Coffee grounds and filters
- Teabags
- Paper towels and napkins (no crazy dyes)
- Egg Shells
What NOT to feed

• Meat
• Dairy
• Fats and Oils
• Pet Poo
• Large amounts of grass or farm animal manure
• Large amounts of citrus or onions
Where to Keep Them

• Outdoors
  – Keep out of direct sunlight
  – Don’t let your local raccoons get into the bin
  – Have a plan for the winter

• Indoors
  – Can keep them in any room
  – Basements, garages, porches, and closets seem to be preferred spots
Harvesting the Bin

• Harvesting Methods
  – Cone
  – Feed One Side
  – Screening
• Rebuild the Bin. Don’t forget some grit!
• Use the Castings
  – Use on indoor and outdoor plants
  – Make some Compost Tea
  – Re-pot plants
  – Mix into existing soil
  – Start seedlings
Worm Bin Maintenance

• Underfeeding is better than overfeeding
• Check moisture level every few days
• Add more newspaper or shredded paper as needed
• If you’re super motivated, get a thermometer and check the temperature every few days
Let’s Look at a Bin!
Questions?

Justen Garrity
justen@veterancompost.com
www.veterancompost.com