# WERMICOMPOST 101

### **THE BASICS**

The nutrient (or decomposition) cycle happens naturally in undisturbed outdoor spaces. Kitchen composting is an attempt to harness this process in a smaller, controlled environment. In a garden, we remove the organic material when we harvest. In order to replenish the nutrients, you need compost. So the benefits of composting is two-fold: eliminate organic waste AND create nutrients for your plants.

Compost is created through a combination of Oxygen, Water, Carbon, and Nitrogen. Decomposers like bacteria, fungi, and worms make compost.

#### WHY VERMICOMPOSTING

**Vermicomposting** is when you use worms to compost your food waste, and it's a highly efficient way to process food scraps. A worm bin with a pound of worms can eat 180-250 pounds of organic waste per year.

### **SUPPLIES NEEDED:**

10-15 gallon shallow tub (NOT clear, has lid, at least 6" deep), Drill, Worms, Newspaper, Bedding (finished compost, leaves, coco peat, peat moss, cardboard, etc.)

### **BUILDING A BIN:**

**STEP 1:** Get worms. We recommend a pound of worms for the size bin we are making. Buy them online or get some from a friend with a bin – worms reproduce very quickly!

STEP 2: Get a shallow 10-15 gallon bin (NOT clear) and a lid. Should be at least 6" deep.

STEP 3: Drill holes in the sides of the tub to allow for air flow.

**STEP 4:** Create a "bed" for your worms by layering the bedding (compost, leaves, etc.) and newspaper strips. Create a layer of 1" of bedding (compost). Shred the newspaper into 1" strips and soak in water, layer the newspaper on top of the first layer of bedding. Repeat the layering, until the bedding is 6" deep.

STEP 5: Create a 1" ditch, put in your worms, cover them back up.

**STEP 6:** Leave off the lid and don't feed for a few days, **keeping the light on**. (Worms don't like the light, and this will help them burrow and get oriented to their new home).

**STEP 7:** In 3-4 days, start feeding your worms. We recommend feeding in a rotation of places in the bin - a different corner each day. When you feed, bury the scraps, rather than just dumping them on top. This is beneficial for the bacteria and worms in your bin and will help prevent a smell.

# WORM BIN MENU

Chop up chunks of food and shred items for easier digestion.
Bury your food scraps!

### PERFECT WORM FOOD

Fruit and vegetable scraps
Coffee grounds and filters
Tea leaves and tea bags
Shredded paper/ paper towels
Flowers and stems
Leaves (brown and green)
Eggshells



# FEED IN MODERATION

Bread Pasta Rice Potatoes



# **OFF LIMITS**

Citrus

Meat and Bones

Dairy

Food with preservatives

Oils / salt











## TROUBLE SHOOTING COMMON PROBLEMS:

SYMPTOM	DIAGNOSIS	REMEDY
Strong, Bad Smell	Not enough air circulation.	Fluff bedding. Make sure bedding or compost is not blocking the airholes. Add paper or leaves.
	Too much food in bin.	Feed worms less food and/or less often.
	Improper food added.	Remove meat, dairy, and oily products.
	Anaerobic conditions.	Add bedding to absorb moisture.
Fruit Flies	Food exposed.	Bury food completely.
	Too much food.	Don't overfeed worms.
Ant Infestation		Place bin outside in colder weather (temperature must not be below 50°F).
		Immerse bin feet in liquid.
		A barrier of chalk or petroleum jelly may repel the ants.
		Place ant traps near, not in, your bin.
		If bedding seems dry, add water.
Mite Infestation	Mite population is high.	Avoid adding foods with high moisture content, such as fruits and vegetables.
Overly Moist	Too much water added to bedding	Stop adding water.
		Add paper to soak up extra moisture.
	Too much food with high moisture content.	Put in less fruit and vegetable waste.

**Feeding:** Worms are not picky when it comes to food, as they eat many of the same items you do. They especially enjoy vegetable and fruit peelings, coffee grounds and filters, newspaper, and veggie scraps. You cannot feed them dairy or meat.

Other organisms you will find in your bin, like springtails and mold, assist worms by breaking down the food waste first. Some foods take longer to break down because they are more fibrous, such as broccoli stocks, carrots, and potato peels. Worms in a standard bin can eat about a pound of food a day.