

## Harvest

**Color** - Observe the grain head and it's spikes; if you notice any green, it's not yet ready. Your grain head will be completely tan when ready

**Bite** - Pull a kernel out of the head and put it in your mouth. When you bite down on the kernel, it shouldn't be soft or chewy. Grains that are ready to be harvested will be hard and crunch

**Nodding Heads** - Grain heads will arch and bow toward the ground

**Materials:** sickle, sheers, scissors, plastic bin/bucket, pillowcase

**Method:** Grab a handful of stalks and cut them 10" below seed head; collect bundles in pillowcase or bin

## Cleaning

**Materials:** plastic bins/bucket, box fan, and a tarp

### Method

**Threshing:** Removing seed from stalk. Threshing is complete when seeds are separate from straw but still with chaff

- 1.Put seed heads in plastic bin.
- 2.Wearing shoes or boots, stomp and roll feet over the seed heads (thresh)
- 3.Set up a box fan on top of a bin
- 4.Lay tarp in front of box fan

## Cleaning continued

**Winnowing:** Removing the seed from the chaff. Winnowing is completed when the seed is isolated from the chaff and other loose plant material

5.Set bin in front of box fan on tarp to catch the seeds

6.Turn fan on, slowly pour seeds into the fan wind. Let seeds drop into the bin and the chaff blow away (winnow)

7.Continue this several times until the collection bin contains only seeds

### Tips/Considerations:

- Switch up the fan settings and the bin's distance from the fan
- If you have a lot of seeds on the tarp, collect the remains and winnow until clean
- Some grains need to be de-hulled: the process of removing the seed from the hull (seed coat or shell) which requires special equipment

## Storage

- 1.Put seeds in freezer safe container and leave in freezer for 2-3 days to kill any microscopic critters before storing
2. Store seeds in glass jars or any other mouse and critter proof container
3. Store in a **cool and dry location** (basement, fridge, corner of closet)

**Plant. Save. Share.**

# Growing Grains

A guide to small scale cultivation for sustenance and diversity



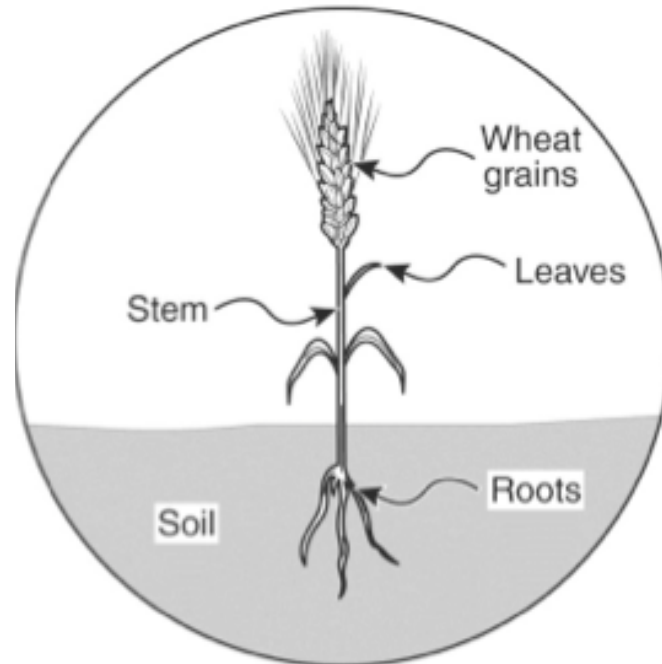
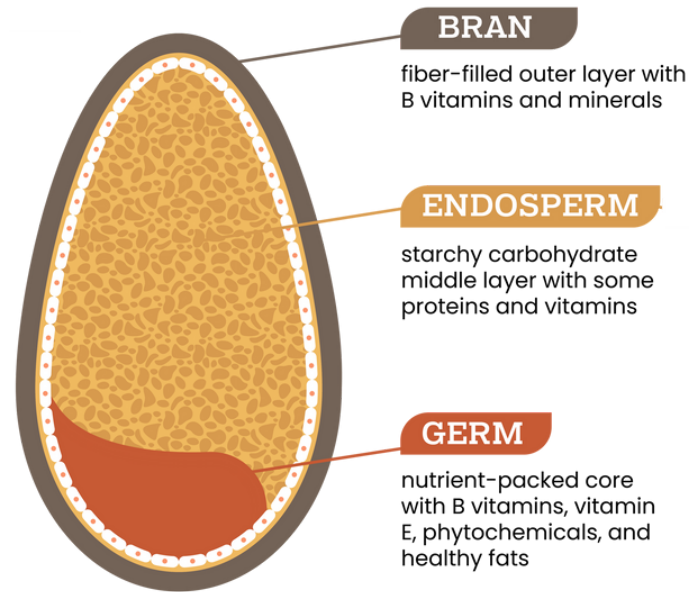
# Modern Wheat vs. Ancient and Heritage Grain Varieties

## Modern Industrial Wheat Varieties:

- bred for uniformity
- are processed in a way that extracts the oils, protein, fiber, and micronutrients from the kernel leaving only the starch and gluten (white or refined wheat)
- shallow root system resulting in low nutrient uptake
- less genetic diversity, less flavor
- requires significant amounts of water and synthetic fertilizers for seed production

## Ancient / Heritage Grain Varieties

- diverse gene pool offers many flavor profiles
- climate resilient and adaptable
- more tolerant to extreme climate conditions like drought and flood
- deep root systems resulting in high uptake of micro and macro nutrients
- well-balanced nutrition: oils, protein, fiber, gluten, and starch (whole wheat)
- lend themselves to a wide range of cooking methods and cuisines



## Habit (Winter and Spring)

**Winter grains** are planted in the fall, before the first frost, and are harvested in the summer. In temperate and cool climates, the snow insulates the fall growth and protects it from frost. The snow melt offers natural irrigation to hydrate the grains during warming weather.

**Spring grains** are planted in the spring as soon as the soil can be worked and harvested in the fall.

## Planting

**Depth:** 1/4 - 1/2"

**Space:** 1' spacing, 1' between rows\*  
- *the plant will grow to fill space with multiple seed heads*

**Water:** Keep moist until germination.  
- *once plants are established they are low maintenance and will require little irrigation. keep area weeded*

\*in arid conditions, planting seeds closer together can create a micro-climate to retain moisture

## Preparing your Garden

If you have compost or soil amendments available, rake them into the soil before planting seeds