

THE TEXAS FORTRESS GARDEN

Mission: Calorie Security & Nutritional Baseline

I. THE INFRASTRUCTURE

1. The Hardscape (The Beds)

- **Quantity:** 4 Raised Beds.
- **Dimensions:** 4 ft wide x 8 ft long x 12 inches deep.
- **Total Growing Area:** 32 Square Feet per bed (128 sq ft total).
- **Material: Standard Concrete Blocks (CMUs).**
 - *Why:* Wood rots in 3 years. Concrete is forever. The hollow holes in the blocks serve as "micro-pots" for flowers.
- **Soil Mix ("Mel's Mix"):**
 - 1/3 Peat Moss (or Coco Coir).
 - 1/3 Vermiculite (Essential for water retention).
 - 1/3 Compost (Blend of Cow Manure & Mushroom Compost).

2. The Perimeter (The Kinetic Shield)

- **The Threat:** Rabbits, Deer, Armadillos.
 - **Material:** 1/2-inch Hardware Cloth (Galvanized welded wire).
 - **Installation:**
 - **Zone Fencing:** Fence the *entire area* containing the 4 beds, leaving a 3ft walkway between beds.
 - **Burial:** Dig a trench 6 inches deep along the fence line. Bury the wire to stop diggers.
 - **Height:** Minimum 3 feet tall.
 - **Gate:** Use T-posts and a panel of hardware cloth zip-tied as a hinge.
-

II. THE CROP ROSTER (The "Why")

Tier 1: Calorie Engines

- **Irish Potatoes (Red LaSoda):** Fast spring carbohydrates.
- **Sweet Potatoes (Beauregard):** The heat-proof survival staple. High calorie, edible leaves.

Tier 2: Protein Silos

- **Pole Beans (Kentucky Wonder):** The "Spring Bridge." Fast protein before the heat hits.
- **Southern Peas (Pinkeye Purple Hull):** The "Summer Tank." Drought-proof protein that restores soil.

Tier 3: Vitamin Tanks

- **Okra (Clemson Spineless):** The only green veg that loves August heat. High Vitamin A/C.
 - **Collard Greens (Georgia Southern):** Cut-and-come-again greens for minerals.
 - **Winter Squash (Waltham Butternut):** Vitamin-dense carbs that store for 6 months without electricity.
 - **Summer Squash (Yellow/Zucchini):** Fast bulk food to fill the spring hunger gap.
-

III. THE BED-BY-BED EXECUTION PLAN

BED 1: THE CALORIE PIT

Goal: Maximum carbohydrate density.

SPRING (Feb 15): Irish Potatoes

- **Seed Prep:** Cut seed potatoes into egg-sized chunks. **Ensure every chunk has at least 2 "eyes" (dimples).** Let them sit on a counter for 48 hours to "scab over" (prevent rot).
- **Depth:** 4 inches deep.
- **Spacing: 1 plant per square foot.** (32 plants total).
 - *Layout:* Visualize a grid of 32 squares. Plant one piece in the center of each.

SUMMER (May 15): Sweet Potatoes

- **Seed Prep:** Use "**Slips**" (live rooted cuttings). Keep roots moist in water until the moment of planting.
 - **Depth:** 4 inches deep (bury the roots and 1 inch of stem).
 - **Spacing: 1 plant per square foot.** (32 plants total).
 - *Note:* The vines will be aggressive. Let them spill over the sides of the concrete blocks.
-

BED 2: THE PROTEIN SILO

Goal: Vertical production and dense ground cover.

SPRING (March 15): Pole Beans

- **Requirement:** Install a sturdy trellis (cattle panel or netting) along the **North** 8-foot edge of the bed.
- **Seed Prep: Soak seeds in water for 12 hours** (overnight) before planting to soften the shell.
- **Depth:** 1 inch deep (First knuckle).
- **Spacing: 1 seed every 3 inches.**
 - *Layout:* Plant a single row along the trellis line.
 - *Total:* ~30-32 plants.

SUMMER (May 20): Southern Peas

- **Seed Prep: Do NOT soak.** They are prone to rot if too wet. Plant dry.
 - **Depth:** 1 inch deep.
 - **Spacing: 4 seeds per square foot.**
 - *Layout:* In every one of your 32 squares, poke 4 holes (like the dots on a dice). Drop a pea in each.
 - *Why:* This creates a "living mulch" canopy that shades the soil and kills weeds.
-

BED 3: THE NUTRIENT TANK

Goal: Mixed Heights (Tall Center / Low Edges).

SPRING/SUMMER (May 1): Okra & Collards

- **The Layout:**
 - **Center 16 Squares:** Okra.
 - **Outer 16 Squares (Perimeter):** Collards.

1. Okra (Center)

- **Seed Prep:** Soak seeds in warm water for 24 hours. (They have a very hard shell).
- **Depth:** 1 inch deep.
- **Spacing:** 1 plant per square foot (Center 16 squares only).

2. Collards (Perimeter)

- **Seed Prep:** None needed.
 - **Depth:** 1/4 inch deep (Lightly cover with dust).
 - **Spacing:** 1 plant per square foot (Outer 16 squares only).
 - *Strategy:* The tall Okra will shade the Collards from the harsh afternoon sun.
-

BED 4: THE STORAGE VAULT

Goal: Large fruit volume.

SPRING (March 15): Summer Squash

- **Seed Prep:** None needed.
- **Depth:** 1 inch deep.
- **Spacing: 1 plant per 4 square feet (2x2 area).**
 - *Layout:* Divide the bed into 8 large blocks. Plant 1 seed in the middle of each. (8 plants total).

SUMMER/FALL (July 1): Winter Squash (Butternut)

- **Seed Prep:** None needed.
 - **Depth:** 1 inch deep.
 - **Spacing: 1 plant per 4 square feet.** (8 plants total).
 - *Note:* As vines grow, train them to circle inside the bed or climb a trellis if available.
-

IV. CONTAINER CITRUS (The Vitamin C Backup)

- **Containers:** 15-20 Gallon pots (Fabric bags or drilled muck buckets).
- **Soil:** 50% Potting Soil + 50% Pine Bark Mulch (for drainage).
- **Tree 1: Arctic Frost Satsuma** (Cold hardy).
- **Tree 2: Improved Meyer Lemon.**
- **Care:** Full sun. Bring into the garage if temps drop below 32°F.

V. WATERING PROTOCOL

- **The "Inch" Rule:** Vegetables need **1 inch of water per week**. In Texas heat (July-Aug), they need **2 inches**.
- **The "Knuckle Test":** Stick your index finger into the soil.
 - *Moist at tip:* Do not water.
 - *Dry to 2nd knuckle:* **WATER IMMEDIATELY.**
- **The Method:**
 - **NEVER spray from above.** Wet leaves = Fungus.
 - Use a wand or hose to flood the soil directly at the base of the plant.
 - **Time:** Water before 9:00 AM to reduce evaporation.

VI. PEST DEFENSE (The Texas Triad)

1. Squash Vine Borer (The Killer)

- *Target:* Summer/Winter Squash.
- *Tactic:* **The Foil Wrap.** As soon as the plant has a stem, wrap the base in aluminum foil (1 inch below soil, 2 inches up). Prevents egg-laying.

2. Tomato/Tobacco Hornworm

- *Target:* Potatoes, Peppers, Tomatoes.
- *Tactic:* **UV Patrol.** Buy a UV Blacklight. Hunt at night. Worms glow neon green. Hand-pick and destroy.

3. Stink Bugs / Leaf-Footed Bugs

- *Target:* Okra, Peas.
- *Tactic:* **Soap Bucket.** Knock them into a bucket of soapy water.

4. The "Holes" Defense

- Plant **Marigolds** inside the hollow holes of your concrete blocks. The scent confuses nematodes and beetles.
-

VII. OPERATIONAL TIMELINE

JANUARY

- ☐ Buy 5lbs Red LaSoda Seed Potatoes.
- ☐ Order 25 Sweet Potato Slips (Beauregard) for May delivery.
- ☐ Buy Seeds: Kentucky Wonder Bean, Purple Hull Pea, Clemson Okra, Georgia Collard, Summer Squash, Waltham Butternut.
- ☐ Construct Beds and Fence.

FEBRUARY 15

- ☐ Bed 1: Plant Potatoes (Cut & Scabbed).
- ☐ Bed 3: Plant Collards (Perimeter).

MARCH 15

- ☐ Bed 2: Plant Pole Beans (Soak 12hr). **Install Trellis.**
- ☐ Bed 4: Plant Summer Squash (Foil Wrap stems).

MAY 1

- ☐ Bed 3: Plant Okra (Soak 24hr).

MAY 15

- ☐ Bed 1: Harvest Potatoes -> Plant Sweet Potato Slips.

MAY 20

- ☐ Bed 2: Pull Beans -> Plant Southern Peas (Dry seed).

JULY 1

- ☐ Bed 4: Pull Summer Squash -> Plant Winter Squash.

OCTOBER

- ☐ Harvest Sweet Potatoes & Winter Squash.
 - ☐ Cure in garage (dry/warm) for 14 days before storage.
-

