



FROM THE FILES OF THE DIRT DIVA DIARIES

Seed Starting & Hardening Off Schedule

From first sow to transplant day · Companion to *Ripe Rewards: A Beginner's Guide to Growing Epic Tomatoes* · DirtDivaDiaries.com

Count backwards from your last frost date — that's your anchor. Start seeds indoors **6-8 weeks before last frost.** Begin hardening off **1-2 weeks before transplant day.** Don't rush it — Ivy says: "It's way better to be fashionably late to the seed-starting party than to be the overeager guest who shows up way too early." Small plants with great roots always beat root-bound giants.

Phase 1 — Setup & Supplies

Before you sow a single seed

WEEK 0 · ONE-TIME PREP

CHECKLIST

- Choose seed-starting tray** — plastic trays without peat pellets preferred; they last for years and hold moisture evenly
Degradable peat pots are high-maintenance — see DirtDivaDiaries.com for tips on making them work
- Buy seed-starting mix only** — not potting mix, not garden soil
Regular dirt is "junk food" for seedlings. Seed-starting mix is their superfood — the right balance of moisture, air & nutrients
- Set up grow lights** — at least 14 hours of light per day required
Without enough light, seedlings go tall, spindly & weak — "stretching like they're trying to escape a bad hair day"
- Get a seed heat/warming mat** — optional but highly recommended
Speeds germination, especially in a cool house. VIP kits include tray + dome + lights + mat — the full package
- Get a humidity dome** — keeps moisture in during germination phase
Remove once seedlings sprout to prevent dampening off
- Choose your seeds** — buy from reputable sources for fresh, viable seeds
Check days-to-maturity on packet — must fit your growing season. See the Tomato Variety Quick-Reference Card
- Find your last frost date** — count back 6-8 weeks to get your seed-sow date
Visit DirtDivaDiaries.com for a free custom zone report with your exact frost dates by zip code

IVY & KEV'S TIPS

- ♦ **Ivy:** "Choose your seeds from reputable sources, like you're picking out designer clothes. You want the freshest, most viable seeds so your tomatoes can walk that runway with confidence."
- ★ **Coco coir pellets** are okay but light on nutrients — if you use them, supplement with a diluted liquid feed from the start. Ivy's "plant crack" pour-over is designed for exactly this.
- ♦ **Set up your light timer before you plant.** Seedlings need consistency — 14+ hours on, 10 hours off. A \$10 outlet timer does the job.

Phase 2 — Sowing Seeds

Planting day — 6 to 8 weeks before last frost

WEEK 0 · PLANTING DAY

CHECKLIST

- Fill cells with damp seed-starting mix** — moistened before sowing, not after
Pre-wetting prevents seeds from washing into corners or floating to the surface
- Sow 2 seeds per cell** at depth listed on packet
Tomato seeds are typically sown ¼ inch deep. Follow packet — "don't go rogue on this one!"
- Water gently** — use a misting bottle or very gentle watering can
Keep soil consistently moist — no soggy bottoms! Seed-starting mix should feel like a wrung-out sponge
- Label every cell** with variety name and sow date
All seedlings look identical at first. Label now or regret it later.
- Cover with humidity dome** and place on warming mat
Target temperature: 70-75°F (21-24°C). Warmth is the #1 germination trigger
- No lights needed yet** — seeds germinate in the dark
Turn lights on the moment you see the first sprout poke through

IVY & KEV'S TIPS

- ♦ **Germination time:** Expect sprouts in 5-14 days at 70-75°F. Cooler temps = slower germination. A warming mat makes a dramatic difference in speed and consistency.
- ★ **Sow 2 seeds per cell** so you always get coverage. You'll thin to one later — keeping the stronger of the two. It feels mean; it's actually kind.
- ♦ **Rotate trays 180°** every few days even before germination — uneven heat from the mat or light can create uneven germination across the tray.

Phase 3 — Germination & First Seedling Care

From first sprout through first true leaves

WEEKS 1-3

CHECKLIST

- Remove humidity dome the moment first sprouts appear**
Leaving it on after sprouting creates dampening off conditions — the #1 seedling killer. Off it comes immediately.
- Turn grow lights on immediately** — 14-16 hours per day
Lights 2-4 inches above the tops of seedlings. Raise lights as plants grow taller. Never let seedlings touch the bulb.
- Watch for cotyledons** — the first two seed leaves to emerge
Cotyledons are not true leaves — they're temporary energy stores from inside the seed. True leaves come next and look different.
- Thin to one seedling per cell** when true leaves appear
Cut the weaker seedling at soil level with scissors — don't pull, which disturbs the winner's roots
- Rotate trays daily** for even light distribution
"We want even tans, not lopsided seedlings." If leaning toward one side, they need more light on the other.
- Water when the top of the mix begins to dry out**
Moist, not wet. Bottom watering (pour into the tray, let mix absorb upward) reduces dampening off risk significantly
- Watch for leggy, stretched seedlings**
Tall and spindly = screaming for more light. Lower lights or increase hours immediately — do not wait.

IVY & KEV'S TIPS

- ♦ **Cotyledons are temporary.** Once true leaves take over photosynthesis, cotyledons yellow and drop — totally normal. Watch the true leaves for health signals instead.
- ★ **Thinning is not murder — it's strategy.** "I know it feels like murder, but trust me, the ones you keep will thank you with a bountiful harvest. It's like giving them the gift of space."
- ♦ **Strong seedlings:** Upright stems, vibrant green leaves, root system filling out the cell. If roots start circling the bottom — time to pot up or harden off. Root-bound seedlings throw tantrums.

Phase 4 — Growing Strong Indoors

Building the muscles they'll need for the real world

WEEKS 3-6

CHECKLIST

- Begin fan training at the 3rd set of true leaves**
Set a small fan on low to oscillate across seedlings. A gentle daily breeze builds thick, sturdy stems — "tiny bodybuilders, ready to flex their muscles when they hit the garden"
- Run fan 1-2 hours daily** — not all day, just enough
Simulates outdoor wind. Wind-toughened tomatoes have extra vigor and handle transplant stress much better than coddled ones
- Start liquid feeding if using coco coir or lean mix**
Diluted balanced liquid fertilizer at ¼ strength weekly. Full-strength seed-starting mix usually has enough nutrients for 4-6 weeks
- Pot up if roots are escaping the bottom** — move to 4-inch pots
"Those tiny seedling compartments are like a crowded nightclub for your roots." Pot up before they become root-bound — not after.
- Keep temp at 65-75°F day / 60-65°F night**
Slight temperature drop at night actually strengthens stems. Too-warm nights = stretchy, weak growth.
- Check root development** — gently tip out of cell to inspect
A healthy root ball is white to cream-coloured, firm, and beginning to fill the cell. Dark, mushy, or circling roots = problem.

IVY & KEV'S TIPS

- ♦ **Ivy's fan trick is a game-changer.** "Once your seedlings sprout their third set of leaves, grab a small fan, set it to low, and let it oscillate like a disco ball. These wind-toughened tomatoes will have extra vigor when transplanted."
- ★ **Late is better than early.** "Smaller plants with well-structured, non-cramped roots outgrow those root-bound giants every single time. It's like the tortoise and the hare, but with tomatoes."
- ♦ **Never pot up into a huge container.** Go one size at a time — seedling cell → 4-inch pot → 6-inch pot if needed. Too much soil around small roots stays wet and causes rot.

Phase 5 — Hardening Off Boot Camp
1-2 weeks before transplant day — non-negotiable
WEEKS 6-8 · 10-14 DAYS TOTAL

DAY-BY-DAY EXPOSURE PLAN

- Days 1-2: Baby steps** — 1-2 hours in a sheltered, shady spot
Out of direct wind and harsh midday sun. A porch, north-facing wall, or under a tree works perfectly. Bring inside before afternoon.
- Days 3-4: Up the ante** — 2-3 hours, a touch more sun
Dappled light or morning sun only. Watch leaves for white bleaching (sunscald) — too much too soon.
- Days 5-7: Turning up the heat** — 4-6 hours, increasing sun each day
Gradually shift from morning sun to a couple hours of direct afternoon light. Still bring in before evening.
- Days 8-14: Full sun, then first overnights** — most of the day outside, increasing to overnight stays if temps stay above 50°F
Plants should stand upright without wilting. Always check the overnight forecast — bring in if any frost is possible.
- Throughout: ease back on watering slightly**
"Encourage those roots to dig deep. We want strong, independent roots, not waterlogged whiners." Let the top inch dry a bit more than indoors.
- Monitor closely** — wilting = bring inside immediately for recovery
Drama queens wilt; tough plants bounce back. Give a wilted plant a day indoors before the next outdoor session.

WHY HARDENING OFF IS NON-NEGOTIABLE

- ◆ **Indoors they had:** consistent temps, zero wind, filtered light, water on demand. Outside is a completely different world — skipping hardening off is transplant shock guaranteed.
- ★ **Three outdoor dangers:** Intense sunlight scorches tender leaves like "a pale tourist at a beach resort." Temperature swings send seedlings into meltdown. Wind dries them out "faster than a gossip column."
- ◆ **Cold frame shortcut:** If you have a cold frame, use it during hardening off — it provides a controlled transition environment and lets you leave seedlings out overnight earlier in the process.
- ◆ **Benefits of doing it right:** thicker leaves, sturdier stems, deeper roots, increased resistance to pests & disease, and higher yields at harvest. Worth every extra day.

Phase 6 — Transplant Day
After last frost, soil temp ≥ 60°F — the big move
WEEK 8+ · ONE BIG DAY

TRANSPLANT DAY CHECKLIST

- Confirm soil temp is at least 60°F** before planting
Cold soil = cold shock to roots, slow establishment, and increased disease vulnerability. A soil thermometer is a \$10 investment that pays dividends.
- Plant deeper than the pot** — bury stem up to first true leaves
Deep planting is a tomato superpower: buried stem sprouts extra roots, creating a bigger, stronger system. "Trust me, tomatoes love it."
- Space 24 inches apart** in rows 3-5 feet wide
Indeterminate / heirloom types may need more. Check your seed packet. Good spacing = airflow = fewer fungal problems.
- Install stake or cage immediately** — at planting, not later
"It's nearly impossible to get a cage over a large tomato plant without doing serious damage." Frame before the house, always.
- Water deeply right after planting** — soil saturation, not sipping
Settle the soil around roots, eliminate air pockets, and kick off root establishment. Add more soil around the stem if settling occurs.
- Mulch 2-3 inches deep** — a few inches from stem, 1 ft radius
Fine bark or wood chips. Retains moisture, regulates soil temp, suppresses weeds. Kev: "Fine bark or wood chips are usually the safest bet for consistent results."
- Keep frost cloth on hand** — a late frost can wipe out everything
"Having frost cloth on hand is like having garden insurance, and it's cheaper than replacing a dozen tomato plants." Keep it within arm's reach for 2+ weeks post-transplant.

IVY & KEV'S TIPS

- ◆ **Ivy on deep planting:** "That buried stem is gonna sprout roots, creating a root system bigger, better, and stronger than ever. Those deeper roots protect your plants if you forget a watering or two."
- ★ **Purchased seedlings still need boot camp.** "Even though they've been living the greenhouse life, they still need to go through tomato boot camp! Hardening them off is a must." — greenhouse plants included.
- ◆ **First fertilizer: 2 weeks post-transplant.** Balanced 10-10-10 + extra calcium (bone meal or oyster shell). See the Fertilizer Recipe Cards in this series for DIY options.

■ ZONE TIMING QUICK REFERENCE — WHEN TO START SEEDS INDOORS
⊗ NEVER DO THESE

ZONE	LAST FROST	START SEEDS INDOORS	KEY NOTES
3	Late May-early June	March	Cold frames; transplant 2-3 wks after last frost
4	Mid-late May	Late Feb-early March	Cold-tolerant varieties; black plastic mulch for soil warmth
5	Early-mid May	Late Feb-early March	Row covers overnight if cold snaps arrive
6	Mid-April-early May	Early-mid February	Mulch for consistent moisture & soil temp
7	Early-mid April	January-February	Stake or cage at planting for vigorous growth
8	Late March-early April	December-January	Shade cloth in peak heat; drip irrigation advised
9-11	Feb or no frost	Oct-Dec (or year-round)	Avoid hottest months; shade cloth + consistent water; visit DirtDivaDiaries.com for full zone report

◆ **Don't Know Your Zone?**
+ Visit DirtDivaDiaries.com and sign up for the free newsletter. You'll receive a custom chart with your growing zone, frost dates, growing days, and sun hours — all based on your zip code. "It's like having a personal garden weather guru!"

- ✗ **Seed Starting Mistakes That Cost You the Season**
- ✗ **Skip hardening off.** Transplant shock can set plants back weeks or kill them outright. Even 3 days of gradual exposure beats none.
- ✗ **Use potting mix or garden soil.** Wrong texture, wrong nutrients, harbours pathogens. Seed-starting mix only, every time.
- ✗ **Leave dome on after germination.** Traps moisture on leaves overnight — dampening off kills entire trays in 24 hours. Off it comes the moment sprouts appear.
- ✗ **Start too early.** Root-bound seedlings fail at transplant. Later is almost always better. Small plants with happy roots win every time.
- ✗ **Transplant into cold soil.** Below 60°F = slow roots, slow growth, high disease risk. A soil thermometer is worth every penny.
- ✗ **Add Epsom salts at planting.** "Epsom salts can actually make blossom end rot worse — magnesium blocks the calcium uptake your tomatoes desperately need." — Ivy

🔗 Related Resources in This Series

- Zone Planting Calendar** — full monthly task guide by zone
- Season Extender Chart** — row covers, Wall-O-Waters, cold frames
- Weekly Tomato Care Schedule** — what to do after transplant day
- Fertilizer Recipe Cards** — DIY feeds to start 2 weeks post-transplant

All resources at DirtDivaDiaries.com →