

GROW YOUR OWN NATIVE PLANTS FROM SEED

WORKSHOP PRESENTED BY:

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WILD ONES SMOKY MOUNTAINS CHAPTER



WHY GROW NATIVE PLANTS FROM SEED?



- Grow more plants for less money.
- Access a wider variety of native species.
- Learn about the full life cycle of the plants you're growing.
- Support wildlife and create habitat.

I grew 750+ native plants at home this year!



UNDERSTANDING SEED GERMINATION CODES

Each species has different requirements for germination.

- A: Germinate after sowing in warm location.
- C(#): Seeds germinate after a period of cold, moist stratification. This can be done naturally outside or artificially in the fridge.
- D: Surface sow. Seeds are small and/or need light to germinate.
- B, H, I, J: Seed treatments, like scarification, nicking, rhizobium inoculation.
- M: Best planted outdoors in the fall.

THREE WAYS TO SOW NATIVE SEEDS

- **Direct Sowing:** Plant seeds directly on the soil where you want them to grow.
- **Summer Sowing:** Start seeds in containers outdoors during warm weather.
- **Winter Sowing:** Start seeds in containers outdoors during winter.



MY SUMMER SOWING EXPERIMENT



- 1,280 cells planted across 10 trays.
- 588 plants grown in under two months.
- All germination code A, grown outdoors in 128-cell trays and bottom watered.
- Purple lovegrass: 120/128.
- Wild bergamot: 7/128.
- Purple coneflower: 0/128 after damping-off problems.

*Experiment, observe, adjust,
repeat!*

WINTER SOWING

Why winter sow in milk jugs?

- Inexpensive and accessible.
- No grow lights.
- Uses natural winter temperatures.
- Helps protect seeds and seedlings.
- Relatively easy to monitor and manage.

Basically a miniature greenhouse made from recycled materials!



HOW TO WINTER SOW IN MILK JUGS

1. **Prepare:** Add drainage holes and cut a hinged opening below the handle. Leave a hinge!
 2. **Fill:** Add 3–4 inches of moistened, well-draining potting mix.
 3. **Sow:** Follow species-specific directions. Otherwise, cover seeds about 1–2 times their thickness; leave tiny, light-requiring seeds on the surface. Sow evenly, not too densely.
 4. **Label:** Record species and date with weather-resistant paint/acrylic markers.
 5. **Close:** Tape the jug shut and leave the cap off.
 6. **Place:** Set outdoors where it receives precipitation, drains freely, and is protected from tipping. Watch for overheating as spring arrives.
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WHAT HAPPENS NEXT?

- **Winter:** Sow at an appropriate time for the species; check moisture periodically.
- **Early Spring:** Watch for germination. Open or vent jugs to prevent overheating.
- **As Seedlings Grow:** Acclimate to outdoor conditions. Thin crowded seedlings, pot up extras for sharing, or transplant sturdy seedlings directly into prepared beds.



COMMON PITFALLS AND PROBLEMS

- **Too deep or too dense:** Follow seed instructions and allow space.
 - **Slow or uneven germination:** Some species need more time.
 - **Extreme cold:** Bring your seedlings inside temporarily if temperatures are projected to get below 15 degrees.
 - **Overheating in spring:** Ventilate and avoid intense heat.
 - **Too wet or too dry:** Keep mix moist, never waterlogged.
 - **Damping off:** Improve airflow and drainage; avoid excess moisture.
 - **Unwanted volunteers:** Watch for windblown weeds; confirm seedling identity before sharing.
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MEET YOUR NATIVE PLANTS!



Match plants to your growing conditions and goals:

- Sun: 6+ hours; part sun: 4–6; part shade: 2–4; shade: 0–2
- Soil moisture: dry to wet
- Mature height and available space
- Container suitability
- Pollinator and wildlife value

FAMILIAR GARDEN FAVORITES



PURPLE CONEFLOWER

Echinacea purpurea

- ☼ Light: Full sun to part sun
- ≈ Moisture: Dry to medium
- ↑ Height: 2 to 4 ft
- * Habit: Clump forming; may self seed
- ▣ Pots: Yes, 5+ gallons, deep pot
- Sowing: 15 to 20 seeds per jug



BLACK-EYED SUSAN

Rudbeckia hirta

- ☼ Light: Full sun to part sun
- ≈ Moisture: Dry to medium
- ↑ Height: 1 to 3 ft
- * Habit: Short lived; readily self seeds
- ▣ Pots: Yes, 3+ gallons
- Sowing: 20 to 30 seeds per jug



ORANGE CONEFLOWER

Rudbeckia fulgida

- ☼ Light: Full sun to part sun
- ≈ Moisture: Medium to moist
- ↑ Height: 2 to 3 ft
- * Habit: Clump forming; slowly expands
- ▣ Pots: Yes, 5+ gallons, deep pot
- Sowing: 15 to 20 seeds per jug

Sowing quantities are approximate for one milk jug. With chaffy seed, aim for a light, even distribution.

SMALLER SPACES AND CONTAINERS



EASTERN COLUMBINE

Aquilegia canadensis

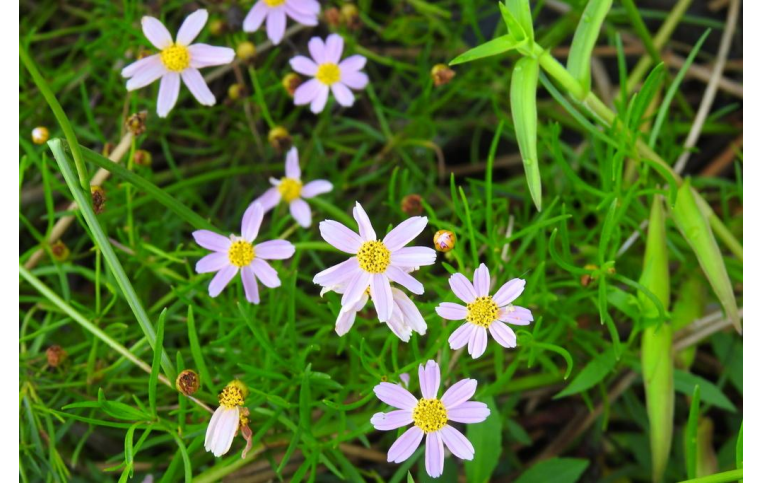
- ☼ Light: Shade to part sun
- ≈ Moisture: Dry to medium
- ↑ Height: 1 to 2 ft
- * Habit: Short lived; self seeds
- ▣ Pots: Yes, 3+ gallons, deep pot
- Sowing: 20 to 30 seeds per jug



PURPLE LOVEGRASS

Eragrostis spectabilis

- ☼ Light: Full sun
- ≈ Moisture: Dry, well drained
- ↑ Height: 1 to 2 ft
- * Habit: Compact bunchgrass; may self seed
- ▣ Pots: Yes, 3+ gallons
- Sowing: 30 to 50 seeds per jug



ROSE COREOPSIS

Coreopsis rosea

- ☼ Light: Full sun
- ≈ Moisture: Medium to moist
- ↑ Height: 1 to 2 ft
- * Habit: Low, spreading perennial
- ▣ Pots: Yes, 3+ gallons; keep moist
- Sowing: 20 to 30 seeds per jug

Sowing quantities are approximate for one milk jug. With chaffy seed, aim for a light, even distribution.

GREAT PLANTS THAT SPREAD



WILD BERGAMOT

Monarda fistulosa

- ☼ Light: Full sun to part sun
- ≈ Moisture: Dry to medium
- ↕ Height: 2 to 4 ft
- * Habit: Rhizomes and self seeding
- ▣ Pots: Yes, 5+ gallons
- Sowing: 25 to 40 seeds per jug



BLUE MISTFLOWER

Conoclinium coelestinum

- ☼ Light: Full sun to part shade
- ≈ Moisture: Medium to moist
- ↕ Height: 1 to 3 ft
- * Habit: Vigorous rhizomatous spreader
- ▣ Pots: Yes, 5+ gallons; keep moist
- Sowing: 30 to 50 seeds per jug

Sowing quantities are approximate for one milk jug. With chaffy seed, aim for a light, even distribution.

TALL AND ARCHITECTURAL



RATTLESNAKE MASTER

Eryngium yuccifolium

- ☼ Light: Full sun
- ≈ Moisture: Dry to medium
- ↑ Height: 3 to 5 ft
- * Habit: Upright, deep rooted clump
- ▣ Pots: No, plant in ground
- Sowing: 15 to 20 seeds per jug



STIFF GOLDENROD

Oligoneuron rigidum

- ☼ Light: Full sun
- ≈ Moisture: Dry to medium
- ↑ Height: 3 to 5 ft
- * Habit: Upright clump; may self seed
- ▣ Pots: No, plant in ground
- Sowing: 25 to 40 seeds per jug

Sowing quantities are approximate for one milk jug. With chaffy seed, aim for a light, even distribution.

FALL FLOWERING ASTERS



SMOOTH BLUE ASTER

Symphyotrichum laeve

☼ Light: Full sun to part sun

≈ Moisture: Dry to medium

↑ Height: 2 to 4 ft

* Habit: Upright; may self seed

▣ Pots: Yes, 5+ gallons, deep pot

○ Sowing: 25 to 40 seeds per jug



AROMATIC ASTER

Symphyotrichum oblongifolium

☼ Light: Full sun

≈ Moisture: Dry to medium

↑ Height: 1 to 3 ft

* Habit: Bushy mound; may self seed

▣ Pots: Yes, 5+ gallons, deep pot

○ Sowing: 25 to 40 seeds per jug



HEATH ASTER

Symphyotrichum ericoides

☼ Light: Full sun

≈ Moisture: Dry to medium

↑ Height: 1 to 3 ft

* Habit: Airy; spreads and self seeds

▣ Pots: Yes, 5+ gallons, deep pot

○ Sowing: 25 to 40 seeds per jug

Sowing quantities are approximate for one milk jug. With chaffy seed, aim for a light, even distribution.

CHOOSE YOUR ADVENTURE!

TRUMPET VINE

Campsis radicans



- ☀ Light: Full sun to part sun
- ≈ Moisture: Dry to medium
- ↕ Height: 20 to 40+ ft
- * Habit: Vigorous climber; root suckers
- ▣ Pots: 25 to 30+ gallons; needs support, pruning and watering
- Sowing: 5 to 10 seeds per jug

WILDCARD SEEDS

Sneezeweed

Helenium autumnale

Great blue lobelia

Lobelia siphilitica

Gray-headed coneflower

Ratibida pinnata

Arkansas ironweed

Vernonia arkansana

Common milkweed

Asclepias syriaca

Dense blazing star

Liatris spicata

Golden Alexanders

Zizia aurea

Rabbit tobacco

Pseudognaphalium obtusifolium

River oats

Chasmanthium latifolium

Nodding onion

Allium cernuum

Little bluestem

Schizachyrium scoparium

Foxglove beardtongue

Penstemon digitalis

Culver's root

Veronicastrum virginicum

Sideoats grama

Bouteloua curtipendula

Looking for something different? Choose freely or ask an experienced gardener for help finding the right fit.
Many of these seeds have limited quantities.



GROW SOME SEEDS. SHARE SOME PLANTS. CREATE MORE HABITAT!

For your own space: Grow habitat in your garden, yard, or containers.

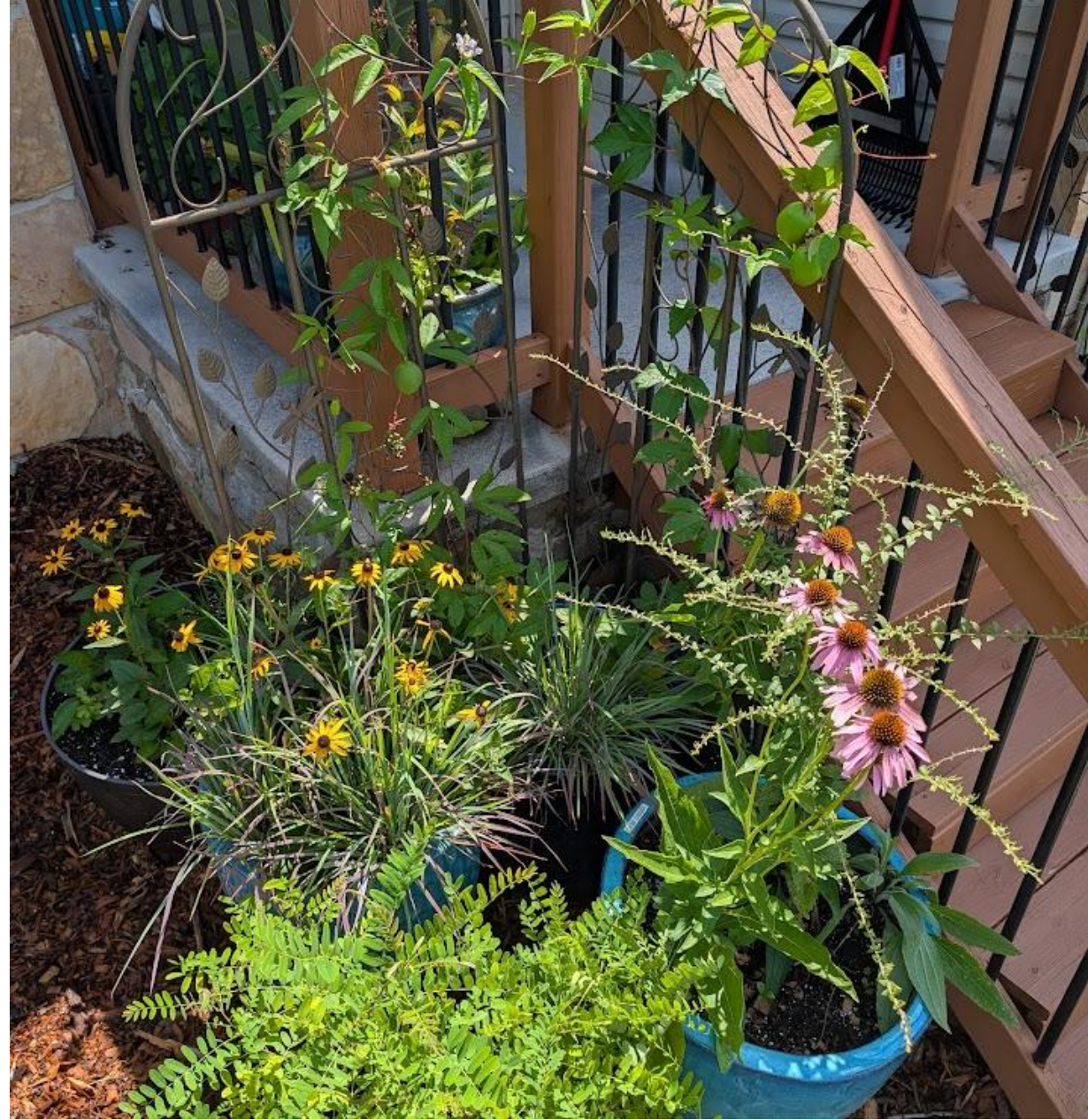
For people you know: Share extra plants with friends, family, and neighbors.

For your community: Consider donating extras to the Wild Ones plant sale!

LET'S GET SOWING

- Choose your seeds. After the first round, explore the wildcard bag.
- Prepare your jug(s) and add 3–4 inches of moist potting mix.
- Sow your seeds and label each jug before starting another species.
- Seal your jug and take it home.

Happy growing!



KEEP GROWING WITH ME

- Share your progress and questions
- Hear about upcoming giveaways and workshops
- Learn more about growing native plants
- Follow along with future propagation experiments



@KristaPlantsNative



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