# Byline: Use Existing Photo

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# Article: Starting Seeds Indoors

Winter is a great time to start plants from seeds, saving you money and enlivening your indoor spaces. This guide will walk you through two easy steps: **Prepare** and **Grow**!

**Prep 1: Choose the Right Seeds—**The first step is selecting the right seeds. Choose varieties well-suited to our climate. In the Piedmont, we’re now hardiness zone 8a. For **vegetables**, see the reference at the end of this article for an excellent vegetable seed-planting guide. Consider vegetables like tomatoes, peppers and flowers like marigolds and petunias, which benefit from a head start indoors. Don’t forget to explore herbs such as basil and cilantro for a fragrant touch to your indoor garden. For flowers, gather seeds that are zone hardy. Some examples are Coneflower (Echinacea), Lupines (Thermopsis spp.), Black-Eyed Susan (Rudbeckia hirta), Milkweed (Asclepias spp.), and Columbines (Aquilegia spp.).

**Prep 2: Gather Supplies—**You’ll need seed trays or pots, a high-quality seed-starting mix, a watering can, and labels. Clear labeling is crucial for keeping track of your plants’ progress. Consider a grow light if your home doesn’t get sufficient natural light. A heating mat can also help maintain a consistent soil temperature, which is crucial for germination.

**Prep 3: Create the Perfect Environment—**Seedlings require warmth and light to thrive. A south-facing window can provide ample light, but a grow light is a reliable alternative to ensure consistent light exposure. Most seeds germinate best at temperatures between 65-75°F. A heating mat can be beneficial, especially in cooler homes. Humidity is also vital – a plastic dome or wrap over your seed trays can help retain moisture.

Regularly check the soil; it should be moist but not soggy. Overwatering can lead to fungal diseases. As your seedlings sprout, ensure they receive 12-16 hours of light daily. Rotate the trays to encourage even growth.

**Grow 1: Plant the Seeds—**For **vegetable** seeds, fill your trays or pots with the seed-starting mix and plant seeds at the depth specified on the seed packet. Generally, plant seeds to a depth twice their size. Gently press the soil over the seeds and water lightly. Label each tray or pot with the plant type and the date sowed. Use a dome to keep the medium moist.

**Flowering** seeds often require cold stratification to germinate. Check seed packages for cold requirements. Plant seeds in moist soil or vermiculite containers, or place them directly in plastic bags with moist medium. Store these containers or bags in a refrigerator or another cold spot below 45°F for at least two months to simulate winter conditions. Ensure that the seeds are moist during this period. Dry seeds won’t benefit from stratification. Then, plant indoors, similar to planting vegetable seeds.

Alternatively, for hardy and half-hardy flower seeds, you can use this outdoor method: Clean milk jugs with soap, water, and bleach. Use gallon-size jugs for their larger soil capacity. Cut an opening beneath the handle for access and air circulation. Add drainage holes at the base. Label each container and fill the lower third with a slightly damp, soilless seed starting mix. Place seeds on the soil, covering lightly if necessary. Seal the jug with tape to create a mini greenhouse. Place the jugs outside, protected from wind but exposed to sunlight and natural elements. Open the containers as temperatures rise in spring and transplant.

**Grow 2: Take Care of the Seedlings—**Your main tasks are watering and monitoring after planting. Water the seedlings with a gentle spray to avoid disturbing the soil or seeds. As they grow, be vigilant for signs of disease or overcrowding. **Tip:**Seed planting instructions typically require planting extra seeds to compensate for germination failure. If seedlings are too close, thin them out by snipping the weakest ones at the soil level.

As your seedlings develop, keep an eye on room temperature and adjust your heating mat or grow light as necessary. A fan can provide gentle air circulation, mimicking outdoor conditions and strengthening the seedlings.

**Grow 3: Transplant or Keep Indoors—**Once your seedlings have grown and the outdoor temperatures are suitable, it’s time to transplant. Begin the hardening-off process about a week before transplanting. Gradually expose your seedlings to outdoor conditions, starting with a few hours a day. Hardening acclimatizes them to the wind, sun, and temperature fluctuations.

When transplanting, handle the seedlings gently, especially the roots. Space them as recommended for their mature size. Water them well after transplanting to help them settle into their new environment.

**That’s It!—**Starting seeds indoors is a rewarding experience, bringing plant excitement and education for the entire family! Happy winter gardening!

## Reference

**Vegetables**: <https://www.ces.ncsu.edu/wp-content/uploads/2016/07/NC-Vegetable-Planting-Guide.pdf>

**Flowers**: (Transplant after the last frost, typically April 15; sorted by popularity)

**Marigolds**: Widely popular due to their vibrant colors and ease of growth.

**Petunia**: Highly favored for their variety of colors and suitability for containers and hanging baskets.

**Impatiens**: Popular for their shade tolerance and continuous blooming.

**Pansy**: Well-loved for early spring color, especially in cooler climates.

**Snapdragon**: Cherished for their unique flowers and height, adding dimension to gardens.

**Geraniums**: Favored for their bright blooms and use in containers.

**Dahlia**: Appreciated for their stunning and diverse flowers, although more challenging to grow.

**Cosmos**: Loved for their simplicity and daisy-like flowers.

**Zinnia**: Known for their bright, cheerful blooms and ease of care.

**Aster**: Valued for their late-season blooms and range of colors.

**Celosia**: Popular for their unique, colorful plumes.

**Viola**: Like pansies, they are loved for their early spring blooms.

**Begonia**: Widely used for both their flowers and foliage, especially in shaded areas.

**Lobelia**: Often used in hanging baskets and for edging due to their cascading habit.

**Salvia**: Popular for their spikes of flowers and attraction to pollinators.

**Dianthus**: Known for their fragrance and prolonged blooming period.

**Alyssum**: Cherished for its fragrance and use as a ground cover or in containers.

**Verbena**: Appreciated for their clusters of blooms and use in hanging baskets.

**Lisianthus**: Valued for their rose-like blooms, though less commonly grown by amateurs due to their more demanding growing requirements.

**Gazania**: Known for their vibrant and striking flowers, but they are less commonly grown.

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