Getting Started: Growing Onions & Leeks from Seed

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There are a lot of advantages to growing onion & leek plants from seed – you have more varieties to choose from, it’s more economical than buying sets (especially if you already have a seed starting setup), and the onions you grow will store better. But for me it’s also a blissful diversion from the dark days of winter, when nothing satisfies like the scent of potting soil or the sight of something green sprouting, and it’s too early to start anything else.

Variety Selection

Onions are a little different from most other crops because they are sensitive to day length—different varieties need different amounts of light in order to start forming bulbs. This makes it extra important to choose the right type for your growing region. Each variety is categorized as a long, intermediate or short day type:

- **Long day** onions only make bulbs when the day length reaches 14-16 hours; they are ideal for Northern growers above 35°N latitude. Long day varieties

  [Image: Woman sitting in a field of onions]
include Ailsa Craig, Cipollini, New York Early, Cortland, Sedona, Yankee, Calibra, Talon, Rossa di Milano, Red Baron & Red Wing

- **Intermediate day** or “day neutral” onions produce bulbs at a wide variety of latitudes as long as they receive 12-14 hours of daylight; they are ideal for Zones 5-6. Intermediate day varieties include Zoey, Gladstone, Walla Walla, Valencia, New York Early, Talon, Cabernet & Rossa di Milano

- **Short day** onions like Gabriella make bulbs when the day length reaches 10-12 hours, and are great for far southern locations like Texas, the Southwest and Gulf Coast states.

Short day onions tend to be sweeter and usually store for only a few months, while longer-day onions generally offer a wider variety of flavors and much longer storage life. Growers in the Pacific Northwest often plant shorter day varieties like Walla Walla in the fall (in greenhouses), then wait for them to form bulbs in spring when the day length rises above 12 hours. With spring planting, however, short day onions planted in the far North will result in miniature bulbs rather than an early harvest. It’s also important to consider the types of onions you enjoy eating (red, yellow or sweet), and any diseases that are common in your area—Cortland, Sedona & Yankee all have resistances that can mean a bigger harvest in areas with severe disease pressure.

**How to Start Transplants**

For most northern growers, direct seeding onions isn’t really an option—the growing season is too short for them to mature unless they get a big head start
indoors. A few varieties, like **New York Early**, are fast enough that they can be direct-sown, but they need early planting and consistently moist soil for this to work. So most growers in the northern half of the country begin their season by starting onion, leek and shallot seed in February or March, about 10-12 weeks before the transplant date. It’s important to start on time, since delaying planting can result in miniature onions if the plants start bulbing before they are full grown.

Check out [this article](#) if you need tips on setting up for seed starting; if not, you’re ready to get started:

1) Moisten your potting soil. Add a little bit of water and mix with your hand, and keep adding a little more water until it feels just barely moist (but not wet or soggy).

2) Fill your tray or pots with the moist soil to within 1/2” of the rim, tamping down lightly as you go.

3) Sow your onion or leek seeds on the surface of the soil, being careful not to crowd them – there should ideally be 2-4 seeds per cell or square inch, and certainly no more than 10 if you’re really trying to stretch your space. The more densely you plant them, the thinner (and more vulnerable) they are likely to be at planting time. My goal is for them to be almost as big around as a pencil by transplanting day.
4) Cover the seeds by lightly sprinkling about 1/8” of potting soil, sand or vermiculite over them, then gently water in. If you have one, cover your tray with a propagation dome to hold in moisture, then place the tray on top of a seedling heat mat. Onions & leeks germinate best at 75-85°F.

5) Once the seeds have germinated, remove the dome, remove the tray from the heat mat and place it under lights. Water gently when the surface of the soil becomes dry to the touch.

6) As the plants grow, gradually raise the lights so they are 1-3” from the top of the plants (depending on the type of bulb you’re using). When the plants reach 5” tall, use scissors to trim them back to 2” as this will encourage them to grow thicker and stronger (and the onion trimmings are delicious in sandwiches & soups!) About two weeks before planting, you can begin **hardening off** your onion starts by moving them outside each day.

How to Grow Onions & Leeks

When it’s time to plant (after the last hard frost, about 2-4 weeks before your last frost date), prepare your planting bed and make furrows about 4” deep. Water your seedlings thoroughly, then use a butter knife to gently remove them from their tray, carefully separating them as needed. Onions can be planted in clumps of 2-4
without reducing yields; leeks and **shallots** should be planted individually. Gently firm the soil around each plant or clump of plants, and don’t worry if only a few inches of foliage are sticking out. Keep the beds well watered and weeded until the plants are established.

Once your onions are well-established (about 8” tall), you can mulch the bed thickly with straw, leaves, or my personal favorite, coffee hulls from a nearby roaster. At this stage, mulching or undersowing with **white clover** helps discourage weeds and retains moisture around the shallow onion roots. Leeks, on the other hand, should be hilled once a month or so by hoeing soil up around their stems, which results in a much bigger harvest. They can be harvested whenever you wish, washed and stored near freezing for many months.

Onions can be harvested fresh for bunching any time, or wait until their tops flop over for storage onions. At this point they can be pulled up and dried in the field for 3-5 days (if the weather is clear), or cured in a warm, dry, well-ventilated place for 2 weeks before trimming their roots and tops.