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Planting Fall Cover Crops

As you go over the garden checklist from last week, cover crops might stand out as a novel idea for your garden. On the surface, cover crops sound like extra effort, but their long-term benefits actually reduce your workload. After warm season vegetables die off, the soil in your garden slows down too. Without plants to cycle nutrients, store carbon, and prevent erosion, your soil can suffer. A barren garden also provides a perfect space for winter and early spring weeds to cause trouble. This is where cover crops come into play.

While different crops offer unique benefits, you will see positive impacts from any cover crop. Roots from cover crops prevent otherwise barren soil from eroding, and allow for greater water infiltration. As they outcompete weeds for resources and create a shade canopy over the soil, they lower the need for herbicides and hand weeding. You will also reduce your need for fertilizers. Their roots prevent nutrient leaching and increase nutrient cycling. Additionally, when cover crops decompose, they add organic matter to your soil. Legumes in particular will move nitrogen from the air into your soil for your spring and summer plants to use.

Capitalizing on these benefits may be easier than you think. First you need to choose a crop. Ideally you will have more than one cover crop. We recommend choosing at least two species, ideally one legume and one non-legume. If you want to plant early spring vegetables, then oats, winter wheat, barley or grain rye are great options. They will go dormant in the winter and leave a small yet meaningful mat of decomposing organic matter for you in the spring. Field peas and oats are a good, reliable pair for those just starting out. Hairy vetch, a legume that produces long vines, pairs well with a small grain crop that it can climb on, like winter wheat, barley, or oats.

After you choose a crop, you should plant before the beginning of October. To prepare for planting, remove existing garden vegetation, mulch, and debris. Then use a rake or garden fork to smooth and loose the top layer of soil. If your entire garden is not done for the year, you can still plant cover crops in the portions of your garden that have died off or stopped producing.

Once you have prepared the soil, check the weather. If possible, time the planting directly before a rain. You can sow them by scattering seeds across the garden (known as broadcast seeding) either with a broadcast seeding implement or simply throwing the seeds with your hands. Alternatively, you can mix the seeds with soil or compost, then spread the mixture evenly across the garden. Whatever method you choose, try to make distribution as even as possible. Follow the instructions that come with your seeds when deciding how much seed to use.

Once the seeds are on the ground, use a rake to gently work them into the soil. While the exact depth varies by crop, most of the seeds will need to be $\frac{1}{2}$ inch deep. You can walk across them to press them in deeper. Although not necessary, you can give them a boost with a balanced fertilizer such as 10-10-10 at a rate of 1 pound per 100 sq feet. If you are planting legume cover crops, use a fertilizer with lower nitrogen rates such as 5-10-10.

Lastly, sit back and watch your cover crops grow and heal your soil!