

Cover Crops
By Linda Sanford
UCCE Master Gardener of El Dorado County

Using cover crops, also called "green manure," is the easiest way to add nutrients to your soil while making your garden look prolific. The organic matter provided when you till under a cover crop will improve soil structure and aeration, increase water and nutrient holding capacity, and supply a portion of the nutrient requirements for whatever you are planning to plant next.

You can plant cover crops at any time of year but the fall crop is the most critical for long-term soil health. Don't just do it one year and say, okay, that was nice: plan to do it every fall. Like flossing your teeth, it should become a habit. Soil building is an ongoing process.

Step One. Purchase seeds, typically sold in one-pound bags. You will need approximately ¼ pound of seed per 100 square feet of planting area.

Step Two. Broadcast seed over weed-free soil. Lightly rake it and cover the surface with organic material.

Step Three. Keep the area moist. In about two weeks you should see seedlings.

Step Four. Let the crop grow for six to twelve weeks.

Step Five. Cut the crop before they set seeds. This is hard to do when they are just beginning to have beautiful flowers. However, this is the time when the largest amount of nitrogen and organic material is supplied. Cut or chop the entire plant to the ground.

Step Six. Let the leaves and stems dry for a few days and then dig them into the soil. It's best to wait three to four weeks for all vegetative matter to decompose before adding new plants or seeds to the area.

Cover crops are in the legume family. They capture and convert atmospheric nitrogen compounds. There are bacteria present on the nodules of the roots of the leguminous plants. This

bacteria (rhizobia) pulls in the atmospheric nitrogen and stores it in the soil. When the leguminous plant dies, its roots release the stored nitrogen into the soil, and this is referred to as nitrogen fixing.

These are some proven leguminous cover crop winners.

<u>Alfalfa</u>: The king of soil building, a perennial that will fix nitrogen and also break up hard soil with its roots.

<u>Alsike Clover</u>: A biennial legume that thrives in poorly drained soil; its deep roots loosen subsoil.

<u>Cowpea</u>: A fast growing annual that improves aeration and brings subsoil minerals up to the top.

<u>Crimson Clover</u>: Stunning deep red flowers; this crop is slightly drought tolerant and takes traffic.

Fava or Bell Beans: Medium drought tolerant, and has purple and white flowers.

Red Clover: Accumulates phosphorus and grows quickly.

<u>Soybeans</u>: Easy to grow, with long-season varieties that make the largest plants.

<u>Sweet Pea:</u> Annual vine that can reach up to six feet, and a romantic plant that has butterfly-shaped flowers.

Vetch, hairy: Annual that grows almost anywhere, with charming purple pea-like flowers.

What you decide to grow depends on what you are trying to achieve. If you want to revitalize a plot, plant a deep-rooted perennial like alfalfa or one of the clovers. On the other hand, use quick-growing annuals such as hairy vetch and crimson clover, to precede seasonal plantings.

Join UCCE Master Gardeners this Saturday, October 10<sup>th</sup> for a free class on asexual propagation. Plant division, cuttings, and layering methods will be shown. Audience members will have a chance to try their hand and bring home starts for new plants. Class is from 9:00 a.m. to noon at the Government Center Hearing Room, Building C, 2850 Fairlane Court in Placerville.

How about learning how to tap into free water sources that are readily available on your own property? Master Gardener Alice Cantelow will present a free class on how to safely and legally use rainwater and greywater. Learn various methods to collect rain water, and how to create a rain garden. Class is October 14<sup>th</sup> from 9:00 a.m. to noon at the Cameron Park Community Center, 2502 Country Club Drive, in Cameron Park.

UCCE Master Gardeners are available to answer home gardening questions Tuesday through Friday, 9:00 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome at our office, located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our UCCE Master Gardeners of El Dorado County website at <a href="http://ucanr.edu/edmg">http://ucanr.edu/edmg</a>. Sign up to receive our online notices and e-newsletter at <a href="http://ucanr.edu/mgenews/">http://ucanr.edu/mgenews/</a>. You can also find us on Facebook.