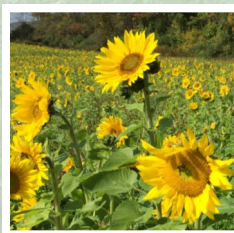
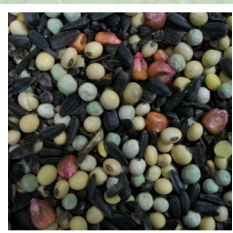
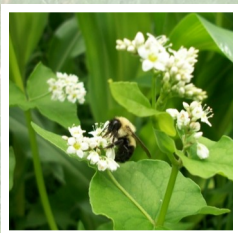


Are you ready for the next level?

✓ **Increase Diversity** – If you have a small grain in your rotation, plant a multi-species mix in July after harvest. Mixes should include a warm season grass (corn, millet, oats), a cool season grass (rye, wheat, barley), warm season broadleaf (brassicas, sunflowers, buckwheat, soybeans, peas), and a cool season broadleaf (clovers, vetch).

- Try to use two legume species to supply nitrogen for the next crop. Make sure to inoculate the legumes. Hairy vetch or Australian winter pea do better with grasses due to their climbing habit.
- When making a mix cut the seeding rate to about 25% of the normal recommended seeding rate.
- Mix all the seed and put it in the big seed box. Stop and remix seed every 20-30 acres. Plant at the mid range between the large and small seed depth recommendations.
- Increased diversity in the plant species will increase the diversity of the soil microbes.



✓ **Interseeding** – This technique establishes covers in early summer between rows of standing corn and soybeans.

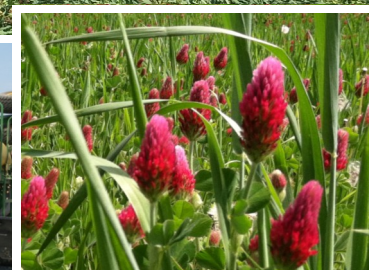
- Annual ryegrass and crimson clover have proven to be successful. Plant a single ryegrass variety for better burndown results.
- Make sure your fields don't have a residual herbicide that will interfere with germination.

✓ **Planting Green** – This allows covers to grow longer into the spring to maximize root growth and mulch for weed control.

- Don't plant your covers too thick. Cereal rye at 1 bu/acre works well. Planting into larger carbon covers require more nitrogen, 45 lbs minimum.
- Roll covers prior to planting or add roller/crimper attachments to your planter.
- May need to apply a herbicide if crimping is poor.



Farmers Improving Soil Health



COVER CROP TIPS

A quick reference guide for the no-till farmer

Why plant cover crops?

- ✓ **Increase organic matter**—from root growth, residue on surface, and root exudates. Organic matter retains moisture and nutrients.
- ✓ **Improve soil structure**—allows for better water infiltration and root growth. Better soil structure reduces compaction issues.
- ✓ **Protect the soil from erosion**—slows the flow of water across the surface and protects from the impact of raindrops.
- ✓ **Weed suppression**—shade out weed seedlings, nature hates bare soil and will fill that void with a weed. If you don't cover it, nature will.
- ✓ **Increase nutrient cycling**—90% of nutrients are cycled through soil biology. Living roots exude simple sugars to feed soil microbes.
- ✓ **Provide habitat for beneficial and predatory insects**
- ✓ **Helps reduce dependency on costly chemical inputs**
- ✓ **Increase soil resiliency to drought and water logging**

Be organized

- ✓ Order seed early and have on hand at planting time.
- ✓ Recruit extra help for fall planting. If conditions are good for harvest, they are good for planting covers.
- ✓ Cereal rye can be planted into mid November. There won't be much winter growth but it will be there in the spring as soils warm.
- ✓ Time your spring termination. Hair pinning occurs when the residue is half dead. It's better to plant green or when covers are dry and crisp.
- ✓ If cereal covers aren't killed before boot stage, planting will require a higher level of management. This may include rolling/crimping and additional nitrogen.

*Plan for covers with the same effort you plan for your main crop.
Think of cover crops as an investment in building healthy soils.*

Farmer-to-farmer tips

- ✓ Keep it simple and cheap to get started. Cereal rye is a good beginning cover crop. You can expand your species as you become more familiar with your circumstances.
- ✓ Ask people from your area to see what is working for them and to share their experiences—both good and bad.
- ✓ Make a plan to establish your cover crop and be intentional. It won't happen if you wait until you have some extra time.
- ✓ The earlier you can plant covers the better results you will have. Plant shorter season crops to maximize the cover crop planting window in the fall.
- ✓ Don't let thick residue such as corn stover keep you from establishing a cover crop. A cover crop can actually aid in decomposing the remaining stover.
- ✓ Choose a weed control program that is compatible with planned cover crops. Avoid long residual herbicide products.
- ✓ Make sure you have a plan for terminating covers in the spring. Do not let them overgrow because they can rob moisture from next crop and also shade new seedlings. Tall covers can also cause wrapping issues during spring planting.
- ✓ Soil is the plant's stomach: if you feed the soil you feed the plant.
- ✓ Never give up. Expect some failures.

Make it a goal to have a living crop in your fields all year round.