Frequently Asked Questions - Soil Health -

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Will cover crops look messy?
Your garden’s appearance is a personal choice, but there’s a lot to say in favor of planted spaces over bare earth. A lot of it depends on what type of cover crops you choose to grow. Not only do they help prevent eroded soil from spilling over yards and walkways and running off into the storm system, they also can create a green space in your yard through the winter, provide cover for wildlife, a colorful aesthetic in an otherwise dreary landscape, and more.

Is it more expensive to use cover crops?
This is a complicated question as it involves a number of variables, but the answer is probably no. Building healthy soil through the use of cover crops leads to a reduced reliance on watering and use of fertilizers, pesticides, and herbicides. You will also be able to forego the expense of compost to build fertile soil. And to top it all off, cover crop seeds are relatively cheap!

What are the long-term soil health benefits of no-till planting and using cover crops?
The benefits of this type of growing operation are so great that the National Resource Conservation Service has made no-till and cover cropping a top priority. As soil health increases, a number of things happen:
- Soil moisture increases and therefore requires less irrigation, saving groundwater sources for other purposes and reducing potentially polluted runoff from reaching nearby streams. Water shortages are projected to occur nationwide within the next 10-20 years, so using soils to help store and replenish water is vitally important.
- Soil organic matter increases and this coupled with the healthy and diverse microbe (soil bugs) community that develops, help increase crop yields without the use of fertilizers, herbicides, and pesticides, taking all of these potential pollutants out of the air and water—and your budget.
- Healthy soil sequesters more carbon, and this can have a measurable effect on climate change. The reduced use of chemicals and mechanical instruments also reduces the amount of carbon released into the atmosphere.
• Cover crops can help support pollinator populations, and these insects are critical for the vitality of natural lands and the productivity of our farms and economy.

**Where can I find cover crop seeds?**
The best place to start is with your local Soil and Water Conservation District. They can help you find reputable sources for your region.

**Where can I find technical assistance?**
There are several organizations that offer technical assistance.
- Your local Soil and Water Conservation District (SWCD)
- The Natural Resource Conservation Service (NRCS)
- NRCS Local Service Centers
- Your local Purdue Extension Service

**What equipment will I need?**
If you have a small garden and typically use only hand tools, you likely have everything you need already. To best protect soil health consider ditching the roto-tiller.

**How do I plant in the absence of tilling?**
If you are transplanting, push the cover crop or mulch aside and dig your planting hole. When planting seed, use a hoe to push aside the cover crop or mulch. Then use the hoe to create your row and slit in the soil. For a single line of seeds, your row shouldn’t be any wider than the width of your hoe (no wider than 6 inches). Sow your seeds and cover with the soil. Leave the mulch alongside your row of seeds.

**How do production rates change when you use no-till and cover crops?**
It’s pretty simple: eliminating tillage and adding cover crops to your practice can produce larger yields. In fact, this type of farming has been catching on with large producers for the past decade or more, and that trend is directly related to increased yields and cost savings. The environmental benefits are yet another advantage.

**Will cover crops attract rodents and bugs?**
Cover crops can attract bugs—and that is often a good thing! After all, healthy soil is healthy because it is a fully functioning ecosystem. When the system is weak, you will still get bugs, but typically the wrong kind (the ones that eat your crops!). A strong system includes insects that control pest populations, protecting your crops and reducing or eliminating the need for insecticides.

Gardens themselves can attract rodents, so cover crops do not pose a new threat. To limit the attraction, you should cut certain cover crops, such as oats, wheat, and rye, before they set seed.

**Will cover cropping require permits? Are there ordinances against their use?**
Many communities do have standard weed ordinances that might appear to conflict with cover cropping. However, more and more communities have begun to recognize the difference between
weeds and purposeful plantings that carry an environmental benefit, and some have adopted exceptions that allow for this kind of activity. If you're in doubt, check with your municipality’s code enforcement office.

**Are there any cost-share opportunities or kits available?**
Many Indiana counties offer cost-share opportunities for soil health practices like cover crops through the Soil and Water Conservation District (SWCD). These programs may or may not be available for smaller gardens, so it’s best to contact your county’s SWCD for more information.

**Are there any local leaders in the practice of no-till and cover cropping?**
The use of cover crops and minimal tilling practices in community or backyard gardens is a relatively new practice but growing quickly in popularity. Pleasant Street Produce and Fall Creek Gardens are a few examples of urban gardens in the Indianapolis area that are implementing no-till and cover crops. Your local SWCD is likely the best place to go for more information on no-till and cover cropping. You can always contact the Clear Choices team at info@clearchoicescleanwater.org if you need more assistance.

**What’s the best way to rotate crops if I only grow a single vegetable, like tomatoes?**
First, try planting your vegetable in a different location in your yard and set up a rotation between this new location and your current location. If you don't have another place or room in your yard to relocate and don’t want to give up the taste of a fresh, home grown tomato, try container gardening. Tomatoes, and many types of vegetables, can easily be grown in containers. Your cover crop can be planted as soon as you’ve harvested your last tomato. When growing season comes around, leave the cover crop to do it’s thing and plant your tomato in a container. The cover crop will recharge your soil and also add diversity to what grows in that location. After you have grown a cover crop for a year, you can plant your tomato in the ground when the next growing season comes around. It is however, a good idea to keep the ground to container rotation going year after year so that you can continue to build the soil health. If you’re in a situation like this, these publications from Purdue University Extension and Iowa State University Extension provide helpful tips on how to get started container gardening.

**Where can I find more resources about soil health and soil science?**
There are a number of case studies from many different sources in regard to the value of cover crops, reduced tillage, and crop rotation. A few from Indiana farmers are listed below. The National Resource Conservation Service is leading this effort among large-production agriculture and has great videos and research findings related to soil health on their Unlock the Secrets webpage.

- **Soil Health Profiles**
  - Anson
  - Villwock
  - Wenning