Cover crops are a secondary crop or crop mix typically grown for the protection and enrichment of the soil, but not necessarily for profit.

Benefits and considerations

A cover crop can:
- Keep a living root in the soil for longer in the year
- Provide ground cover
- Increase biodiversity in the cropping system
- Decrease erosion
- Increase weed control
- Improve nutrient cycling
- Sequester carbon
- Reduce nutrient leaching and runoff
- Produce additional livestock feed and increase the amount of grazing days

Consider these questions before planting cover crops:
- What is the long term strategy for my fields?
- What is the ideal time frame to plant the cover crop?
- What equipment do we already have, or can we easily acquire?
- What changes would I have to make to my current cropping system?
- What is our tolerance for risk?
- How does the region we live in affect the types of cover crops that are likely to be successful?
- How do we initiate this conversation with our landowner?

Many variables affect the amount of cover crop growth and the potential impact on the next year’s cash crop. Most current recommendations are based on small trials and individual experiences, which means there is trial-and-error involved.

SHP supports farmers who choose cover crops that improve the long-term health and profitability of their farms. The SHP field team is available to assist farmers’ understanding of how to adopt cover crops successfully on their farm.

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Categories of cover crops

Cover crops fall into one of four main categories based on their growing pattern:

**Winter Hardy**
- These cover crops are generally established in the fall, will live through the winter, and add more growth in the spring.
- Winter-hardy crops do not always have to be terminated before planting the next cash crop in the spring, but this varies depending on your growing region.
- Winter-hardy crops include cereal rye, wheat, triticale, barley, and hairy vetch.

**Conditional Winter Hardy**
- The ability of these covers to overwinter is primarily determined by planting date.
- Late summer to early fall planting ensures that the plants are able to become well-established before a killing frost and continue growing in the spring.
- Conditional winter-hardy species include annual ryegrass, rapeseed, clovers, and most legumes.

**Winter Kill**
- These cover crops terminate due to cold temperatures.
- Many require temperatures in the lower twenties to high teens for termination.
- Winter-kill cover crops have the potential to overwinter, depending on the snowfall.
- Winter-kill species include oats, turnips, and radishes.

**Summer Annual**
- The cover crops in this category are heat-driven and are typically planted early to mid summer.
- Because summer annuals cannot handle frost or freezing temperatures, they should not be planted in the fall.
- Summer annuals are often planted as a mix and used for grazing, harvested forage, reducing extreme compaction, or prevented planting acres.
- Summer annuals include sorghum, sudangrass, sorghum-sudangrass, buckwheat, millet, and sunn hemp.

Always research cover crops before planting in order to meet the goals you have set for your farm. Visit soilhealthpartnership.org to learn more about cover crops.