CARBON IMPACT OF CONSERVATION PRACTICES: COVER CROPS

Cover crops provide an alternative to letting a field lie fallow during the off season. Planted prior to or immediately after cash crop harvest, they keep a living cover on the soil, which protects it from erosion and contributes to soil health. Most cover crops are not typically grown to sell, although they can be used for grazing.1,2,3

A BOUNTY OF CHOICES

Among the many options for cover crops, common choices include cereal rye, wheat, oats, turnips, and tillage radishes. Additional benefits come from planting multiple species of cover crops as well. Selection depends on the needs of the farm. Some cover crops survive the winter and need to be terminated in the spring. Others grow only in the fall and die from winter frost.4,5

THE GREAT PROBLEM SOLVERS

Cover crops are powerful tools in successful farm and soil management. They can be selected to address specific issues, including managing nutrients such as nitrogen. They put nitrogen back into the soil or help affix excess nitrogen and decrease nutrient losses. Cover crops have many benefits.6,7

Sources

The Natural Resources Conservation Service (NRCS) supports cover crops through programs such as the Conservation Stewardship Program (CSP) and the Environmental Quality Incentives Program (EQIP). These programs provide producers with both technical and financial assistance to start using cover crops. Visit a local USDA Service Center to find out more. Find local offices at offices.sc.egov.usda.gov/locator/app. Additional industry support, such as discounts on seed and crop insurance, is also available.11

**CARBON SEQUESTRATION**

When paired with reduced and no-till systems, cover crops sequester even more carbon and add carbon even deeper into the soil.12

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**Benefits of cover crops**8,9,10

- **Add organic matter to soil**
- **Enhance soil structure**
- **Improve water-holding ability**
- **Improve carbon sequestration**
- **Manage nitrogen**
- **Provide grazing for livestock**
- **Reduce erosion**
- **Provide weed control**
- **Provide mulch**

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**Adding cover crops can sequester up to 0.32 metric tons of carbon dioxide per acre per year and up to 0.49 metric tons of carbon dioxide equivalent per acre per year.**13

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**Sources**


