Title of the Practice Cover Crops (NRCS Conservation Practice 340)

Definition: Crops that include grasses, legumes and forbs that provide seasonal cover in periods when cash crops are not planted.

Purposes: Cover crops provide multiple benefits. Chief among them is enhanced soil quality, which is defined by improvements in soil fertility, physical properties and microbiological ecology. Cover crops capture and recycle nutrient “leftovers” from previous crops, suppress weeds, biologically fix nitrogen, increase soil organic matter content and moisture retention and add diversity to cropping systems.

General Expectations: Cover crop species, planting dates, rates, depth and methods will be within established cultural norms for local site and soil conditions. Species planted will be compatible with other crops in the rotation and not invasive or noxious species. Cover crop residues will not be burned.

Additional management expectations for specific resource concerns:

* To prevent erosion, plant cover crops in a timely manner such that the soil surface is protected during periods when rainfall events are expected and erosion is predicted to occur. Choose species that will that have physical properties and provide adequate cover to protect soil
* To increase soil organic matter content, choose species that excel at biomass production (leaf and root), maximize the growing season by planting as early and terminating as late as possible (taking into account soil moisture depletion and crop insurance parameters) and time of planting for subsequent crops.
* To capture and recycle nutrients, have crops established and actively growing before expected periods of rain and related nutrient leaching from the upper soil profile, select species with superior scavenging capacity and terminate cover crop growth as late as possible (as above).
* To increase biological nitrogen fixation, choose legume species that have high biomass production potential and inoculate the with species-specific rhizobium inoculant.
* To suppress weeds, 1) choose species that have proven chemical (allelopathic) and physical properties to suppress or compete with weeds, 2) leave residues on the soil surface to chemically and physically suppress weeds and 3) use high seeding rates.
* To manage soil moisture content, kill cover crops in a timely manner to ensure adequate moisture for germination and early-season growth of subsequent crops or, in “wet” soils, allow cover crops to grow as long as possible before terminating growth.
* To minimize soil compaction, choose species that produce large amounts of root biomass such as forage radish.

General practice recommendations: Plant and terminate cover crops in a timely manner to ensure a good stand and allow for desirable biomass accumulation and soil moisture content before planting the subsequent crop. Manage the C:N ratio of the cover crop through the use of mixtures (small grains provide additional carbon) and kill date to match nutrient release from residues to nutrient needs of the subsequent crop. High C:N residues release nutrients more slowly. Deeper rooting species have greater potential capacity to recycle available nutrients. Multi-species mixtures provide multiple services, among which is the enhancement of pollen and nectar sources for pollinator and beneficial insects.

North Carolina Practice Financing (2014):

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| Practice | Cover Crop Component | Unit | Payment Rate |
| Cover Crop | Nitrogen Fixing Cover | Acre | $73.99 |
| Cover Crop | Nitrogen Fixing Cover HU\* | Acre | $88.79 |
| Cover Crop | Nitrogen Scavenging Cover | Acre | $68.83 |
| Cover Crop | Nitrogen Scavenging Cover HU | Acre | $82.60 |
| Cover Crop | Soil Health Cover | Acre | $87.36 |
| Cover Crop | Soil Health Cover HU | Acre | $104.83 |
| Cover Crop | Organic Weed Control Cover | Acre | $105.89 |
| Cover Crop | Organic Weed Control Cover HU | Acre | $127.06 |

\* HU = Historically Underserved and Beginning Farmer Rates

South Carolina Practice Financing (2014):

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| Practice | Cover Crop Component | Unit | Payment Rate |
| Cover Crop | Legume | Acre | $68.22 |
| Cover Crop | Legume HU\* | Acre | $81.86 |
| Cover Crop | Legume organic | Acre | $114 |
| Cover Crop | Legume organic HU | Acre | $137 |
| Cover Crop | Non-legume | Acre | $56.74 |
| Cover Crop | Non-legume HU | Acre | $68.09 |
| Cover Crop | Non-legume organic | Acre | $72.26 |
| Cover Crop | Non-legume organic HU | Acre | $86.72 |
| Cover Crop | Mix | Acre | $68.22 |
| Cover Crop | Mix HU | Acre | $81.86 |
| Cover Crop | Mix organic | Acre | $114 |
| Cover Crop | Mix organic HU | Acre | $137 |

\* HU = Historically Underserved and Beginning Farmer Rates

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