

# UNLOCK YOUR FARM'S POTENTIAL Discover the Cover





# Diverse cover crop mixes increase the success of most agricultural systems.

Plant biodiversity helps to prevent disease and pest problems associated with monocultures. Using cover crops and increasing diversity within crop rotations improves soil health and soil function, reduces costs, and increases profitability. Diversity above ground improves diversity below ground, which helps create healthy productive soils.

## **Cover Crops**

Cover crops are grasses, legumes, and forbs planted for seasonal vegetative cover. Well-managed cover crops can be an integral part of a cropping system. Cover crops can be managed to improve soil health, as they help to develop an environment that sustains and nourishes plants, soil life and beneficial insects. Cover crops can be planted any time of the year, typically following cash crops. Examples of cover crops include rye, wheat, triticale, oats, clovers and other legumes, turnips, radishes, sunflowers, buckwheat, etc. Planting several cover crop species together in a mixture can increase their impact on soil health. Each cover crop provides its own set of benefits, so it's important to choose the right cover crop mixture to meet management goals.

### **Cover Crop Benefits**

• **Restoring Soil Health** – Cover crops help increase organic matter in the soil and improve overall soil health by adding living roots to the soil during more months of the year. Cover crops can improve water infiltration; for example, planting deep-tap rooted crops like forage radishes can create natural water passages. Also, fibrous rooted grass plants help break up compaction layers at the surface and allow water to percolate deeper in the soil. Legume cover crops serve as natural fertilizers while grasses scavenge nutrients that are often lost after harvest or during winter.

- Natural Resource Protection Along with crop residue above ground, cover crops protect the soil against erosive heavy rains and strong winds. Cover crops trap excess nitrogen, keeping it from leaching into groundwater or running off into surface water – releasing it later to feed growing crops.
- **Livestock Feed** Cover crops can provide livestock producers with additional forage opportunities.
- Wildlife Habitat Cover crops provide winter food, cover, and nesting sites for birds and other wildlife. During the growing season,flowering cover crops can provide food and habitat for pollinator and other beneficial insects.

#### Soil Health Management Systems

Implementing Soil Health Management Systems consisting of a group of practices like no-till or reduced till, cover crops, prescribed grazing, nutrient management, and pest management can lead to increased organic matter, reduced greenhouse gases, more soil organisms, reduced soil compaction, and improved nutrient storage and cycling. Healthy soils have greater aggregate stability and therefore absorb and retain more water, making them less susceptible to runoff and erosion. This means more water will be available for crops when they need it. Soil Health Management Systems can allow farmers to enjoy cost savings from reduced inputs as well as more consistent yields, increased crop quality, and increased resilience to weather extremes resulting from improved soil conditions.



#### **More Information**

To learn more about Soil Health Management Systems and the technical and financial assistance available visit **farmers.gov/conserve/soil-health** or contact your local NRCS office. To find your local NRCS office, visit **farmers.gov/service-center-locator**.

