

HEALTHY, PRODUCTIVE SOILS

Checklist for Growers



Managing for soil health is one of the easiest and most effective ways for farmers to increase crop productivity and profitability while improving the environment.

Results are often realized immediately, and last well into the future. Using these four basic principles is the key to improving the health of your soil.

- Keep the soil covered as much as possible
- Disturb the soil as little as possible
- Keep plants growing throughout the year to feed the soil
- Diversify as much as possible using crop rotation and cover crops

Use the checklist on the back of this page to determine if you're using some or all of the core Soil Health Management System farming practices.

It is important to note that not all practices are applicable to all crops. Some operations will benefit from just one soil health practice while others may require additional practices for maximum benefit. But these core practices form the basis of a Soil Health Management System that can help you optimize your inputs, protect against drought, and increase production.

[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.

WHAT IS IT?		WHAT DOES IT DO?	HOW DOES IT HELP?
<p><input type="checkbox"/> Conservation Crop Rotation</p> <p>A planned sequence of crops grown on the same ground over a period of time (i.e. the rotation cycle).</p>		<ul style="list-style-type: none"> Increases nutrient cycling Helps manage plant pests (weeds, insects, and diseases) Reduces sheet, rill, and wind erosion Holds soil moisture Adds diversity so soil microbes can thrive 	<ul style="list-style-type: none"> Improves nutrient use efficiency Decreases use of pesticides Improves water quality Conserves water Improves plant production
<p><input type="checkbox"/> Cover Crop</p> <p>Grasses, legumes, and forbs planted for seasonal vegetative cover.</p>		<ul style="list-style-type: none"> Increases soil organic matter Prevents soil erosion Conserves soil moisture Increases nutrient cycling Provides nitrogen for plant use Suppresses weeds Reduces compaction Feeds soil life Reduces residual nutrient loss 	<ul style="list-style-type: none"> Improves crop production Improves water quality Conserves water Improves nutrient use efficiency Decreases use of pesticides Improves water efficiency to crops Improves water infiltration
<p><input type="checkbox"/> No Till</p> <p>Limiting soil disturbance to manage the amount, orientation and distribution of crop and plant residue on the soil surface year-round.</p>		<ul style="list-style-type: none"> Improves water holding capacity of soils Increases organic matter Reduces soil erosion Reduces energy use Decreases compaction Reduces soil evaporation 	<ul style="list-style-type: none"> Improves water efficiency Conserves water Improves crop production Improves water quality Saves renewable resources Improves air quality Increases productivity
<p><input type="checkbox"/> Reduced Tillage</p> <p>Using tillage methods where the soil surface is disturbed but maintains a high level of crop residue on the surface.</p>		<ul style="list-style-type: none"> Reduces soil erosion from wind and rain Increases soil moisture for plants Reduces energy use Increases soil organic matter Reduces soil evaporation 	<ul style="list-style-type: none"> Improves water quality Conserves water Saves renewable resources Improves air quality Improves crop production
<p><input type="checkbox"/> Mulching</p> <p>Applying plant residues or other suitable materials to the land surface.</p>		<ul style="list-style-type: none"> Reduces erosion from wind and rain Moderates soil temperatures Increases soil organic matter Controls weeds Conserves soil moisture Reduces dust 	<ul style="list-style-type: none"> Improves water quality Improves plant productivity Increases crop production Reduces pesticide usage Conserves water Improves air quality
<p><input type="checkbox"/> Nutrient Management</p> <p>Manage rate, source, placement, and timing of plant nutrients and soil amendments while reducing environmental impacts.</p>		<ul style="list-style-type: none"> Increases plant nutrient uptake Improves the physical, chemical, and biological properties of the soil Budgets, supplies, and conserves nutrients for plant production Reduces odors and nitrogen emissions Reduces excess nutrient applications 	<ul style="list-style-type: none"> Improves water quality Improves plant production Improves air quality
<p><input type="checkbox"/> Pest Management Conservation System</p> <p>A system that combines an integrated pest management (IPM) decision-making process with natural resource conservation to address pest and environmental impacts.</p>		<ul style="list-style-type: none"> Reduces pesticide risks to water quality Reduces threat of chemicals entering the air Decreases pesticide risk to pollinators and other beneficial organisms Increases soil organic matter Increase soil organism diversity and activity 	<ul style="list-style-type: none"> Improves water quality Improves air quality Increases plant pollination Increases plant productivity Supports pollinators and other beneficial insects