



## Soil Health and Livestock: ATTRA Resources

Call 1-800-346-9140 to request these publications or visit [www.attra.ncat.org](http://www.attra.ncat.org).

### Soil Health Resources

#### ***Sustainable Soil Management***

This publication covers basic soil properties and management steps toward building and maintaining healthy soils. It introduces basic soil principles and provides an understanding of how living soils work. It also covers management steps to build soil quality on your farm and profiles farmers who have successfully built up their soil.

#### ***Nutrient Cycling in Pastures***

Nutrient cycles important in pasture systems are the water, carbon, nitrogen, and phosphorus cycles. This in-depth 64-page publication provides basic descriptions of these nutrient cycles then provides guidelines for managing pastures to enhance nutrient cycling efficiency for productive forage and livestock growth, soil health, and water quality.

#### ***Drought Resistant Soil***

To minimize the impact of drought, soil needs to capture the rainwater that falls on it, store as much of that water as possible for future plant use, and allow

#### **No-Till Case Study Series**

These case studies tell the stories of four North Dakota operations that have greatly improved soil health using mixed cover crops.

- Bauer Farm: Cover Crop Cocktails on Former CRP Land
- Brown's Ranch: Improving Soil Health Improves the Bottom Line
- Miller Farm: Restoring Grazing Land with Cover Crops
- Richter Farm: Cover Crop Cocktails in a Forage-Based System



Photo: Robyn Metzger, NCAT

for plant roots to penetrate and proliferate. These conditions can be achieved through management of organic matter.

#### ***Plus:***

- ***Overview of Cover Crops and Green Manures***
- ***Assessing the Pasture Soil Resource***
- ***Soil Management: National Organic Program Regulations***

### Livestock and Soil Health

#### ***Pastures: Sustainable Management***

Well-managed forage systems contribute significantly to the sustainability of a farm/ranch operation. This publication addresses numerous aspects of sustainable pasture integration, grazing rotation strategies, and management options. It covers grazing systems, pasture fertility, changes in the plant community through grazing, weed control, and pasture maintenance.

## ***Integrating Livestock and Crops: Improving Soil, Solving Problems, Increasing Income***

Incorporating livestock into a crop farm can benefit the soil organic matter and fertility, diversify the product base, provide new sources of income and farm resilience, and help with weed and pest control. This publication outlines some of the benefits and challenges of integrating livestock into a farm and offers tips and resources to ease the transition.

## ***Why Intensive Grazing on Irrigated Pastures?***

Intensive grazing makes use of short paddock grazing periods, high stocking densities, and planned pasture-recovery periods designed to optimize forage quality, diversity, and longevity. It optimizes forage production and harvest, thereby maximizing net profit.

## ***Irrigated Pastures: Setting Up an Intensive Grazing System That Works***

An intensive grazing design is based on only three parameters: recovery period, grazing paddock period, and the growth rate of the forage. It requires a step up in management that is easily accomplished through the use of a grazing spreadsheet and field experience.

### ***Plus these titles:***

- ***Paddock Design, Fencing, and Water Systems for Controlled Grazing***
- ***Ruminant Nutrition for Graziers***

- ***Tools for Managing Internal Parasites in Small Ruminants: Pasture Management***

## **Videos and Webinars at <https://attra.ncat.org/video/>**

- ***Intensive Grazing: One Farm's Set-Up***
- ***Organic Research and Needs: Cover Crops, Crop Rotation, and Soil Health***
- ***Increasing Diversity and Enhancing Stewardship with Cover Crops***
- ***Mixed Cover Crops: An introduction***
- ***Innovative No-Till: Using Multi-Species Cover Crops to Improve Soil Health***



Photo: Robyn Metzger, NCAT

### **ATTRA - National Sustainable Agriculture Information Service**

- Friendly staff, knowledgeable about livestock, horticulture, agronomy, organic farming, marketing, farm energy, and other sustainable agriculture topics.
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