Managing Your Soil Health

Helping People Help the Land

New Mexico

Soil is a living and lifegiving substance, without which we would perish.

As world population and food production demands rise, keeping our soil healthy and productive is of paramount importance. So much so that we believe

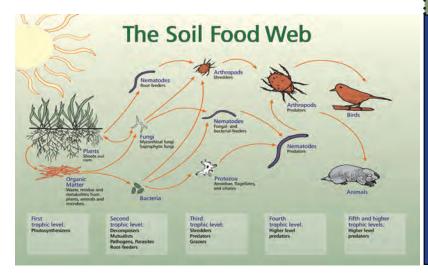


improving the health of our Nation's soil is one of the most important endeavors of our time.

By focusing more attention on soil health and by educating our customers and the public about the positive impact healthy soils can have on productivity and conservation, we can help our Nation's farmers and ranchers feed the world more profitably and sustainably – now and for generations to come.



The creatures living in the soil are critical to soil health. They affect soil structure and therefore soil erosion and water availability. They can protect crops from pests and diseases. They are central to decomposition and nutrient cycling and therefore affect plant growth and amounts of pollutants in the environment. Finally, the soil is home to a large proportion of the world's genetic diversity.



Did You Know?

Cover crops are one of the most effective ways to improve soil health, optimize production inputs and protect natural resources.

Using these four basic principles is key to improving the health of your soil.

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

Rio Grande Community Farm (RGCF) is a nonprofit 501(c)3 organization located in Albquerque, New Mexico. The 138-acre farm is owned by the City of Albuqueque's Open Space Division. The City acquired the land in 1995 after a two-year campaign to preserve this last remaining parcel of farmland in the North Valley. Recognizing the value to the community of maintaining this agricultural space, the City passed a two-year 1/4 cent sales tax to provide funds for its acquisition. RGCF was founded in 1997 and undertook management of the farm.

The Farm holds a special place in the history of Albuquerque. It occupies the original site of Los Poblanos, one of the earliest

Spanish Colonial settlements in the Rio Grande Valley. It is, in fact, a

living link in an agricultural heritage that extends over 1700 years, making it among the oldest parcels of continually farmed land in the United States. Years of hard work have transformed the neglected land into community gardens, wildlife habitat, and certified organic croplands. These



Planting into plastic mulch with cover crops on either side of row

provide educational experiences, community service projects, recreation and entertainment to a broad segment of our population while honoring our history and protecting the environment. Recent studies have shown that agricultural lands contribute significantly to recharging Albuquerque's aquifer.

Soil Health Management Practices Implemented at the Rio Grande Community Farms

Note: The soil health management practices listed below is the actual sequence in which they were implemented. For soil health to work at an optimum level a soil health management system has to be implemented.

	1.	Evaluate available irrigation water quantity and quality from surface and/or aquifer sources	7.	Use of flail chopper or crimper to terminate cover crops
า- e	2.	Laser leveling	8.	Use of lister/peeler to prepare planting rows. Use of no-till drill to plant directly into existing killed or living cover crop
	3.	Subsurface drip irrigation for water conservation	9.	Plant diverse crop rotation to assist in breaking disease, insect, and weed cycles
	4.	Soil testing for nutrients and reactive carbon	10.	Foliar feeding of nutrients directly to plant leaves
	5.	Nutrient Management Plan: For the proper use of all organic nutrient sources	11.	Integrated Pest Management based on prevention, avoidance, monitoring, and suppression
	6.	Plant cover crop cocktails for improving nutrient cycling, building soil organic matter and improving soil health		

Additional Conservation Practices Implemented

- A. Build hoop house to extend the growing season and diversify crop production for local consumption

 C. Use of trellises to grow plants vertically (e.g., peas and beans)
- B. Use of organic mulch to preserve water and suppress weeds

As our population grows and as water becomes more scarce, it becomes increasingly important to preserve agricultural lands in order to safeguard our quality of life. RGCF is an agricultural jewel in the center of Albuquerque. Open to all, the farm provides city dwellers with rural experiences: growing food for their families or for needy mem-

bers of the community, learning about agriculture and the area's history, observing wildlife, walking the historic acequias, and participating in annual events such as the Maize Maze and Harvest Festivals. The organic farm is a model for teaching methods of sustainable, organic agriculture.



Training peas on trellises

