

## Working to Improve Soil Health in New Jersey

Keeping our soil healthy and productive is of paramount importance. Farmers who utilize soil health principles and systems like no-till, cover cropping and diverse rotations are actually increasing their soil’s organic matter and improving microbial activity. By implementing practices like these, they are sequestering more carbon, increasing water infiltration, improving wildlife and pollinator habitat—all while harvesting better profits and often better yields.

### Soil Health Initiative in New Jersey

The Natural Resources Conservation Service has been working with agricultural producers to enhance soil health since the agency was established as the Soil Conservation Service in 1935. In recent years, the agency has stepped up the focus on soil health, and in 2014 NJ-NRCS added the Soil Health Initiative to the Environmental Quality Incentives Program. Through the Initiative, technical and financial assistance was provided to farmers who agreed to add multi-species cover crop and other conservation activities that promote soil health to their management plans for a three-year period on the same field(s).

Fields enrolled in the Initiative were periodically tested by NRCS soil scientists over the 3-year period. Data collected was used to determine if any reduction of erosion, improvement of physical, chemical, and biological properties, weed suppression, increased water-holding capacity, reduction of nutrient losses, and remediation of soil compaction resulted.

An ESRI story map entitled *Soil Benefits from Multi-Species Cover Crop in New Jersey*, provides data collected during the first three years of the Initiative and trends observed. (Online at <https://arcg.is/0v4Hin>)



### Soil Health Initiative Contracts



Year	Number of contracts	Dollars	Acres Impacted
FY18	6	\$295K	1,248.1
FY17	7	\$261K	1,221.6
FY16	1	\$45K	10.0
FY15	4	\$45K	151.2
FY14	16	\$325K	1,524.7

More on the Soil Health Initiative online  
<https://go.usa.gov/xEfjw>

## New Jersey Farmers Championing Soil Health

### Jeremy Sahl, Atlantic County, New Jersey

Jeremy Sahl participated in the Soil Health Initiative from 2014 through 2018. He operates a family farm in Port Republic, NJ. Because sandy soils are typically found on his farm, improving soil organic matter was important to him. When Jeremy enrolled his farm in the Initiative, he was focused on planting cover crops that would provide plenty of biomass to increase soil organic matter content.

*I originally came into NRCS because I was concerned about the organic matter in my soil. Before I started the Soil Health Initiative, my organic matter was at 0.1%, and I had a sandy knoll where I couldn't get a bushel of corn to grow. After the program, my organic matter is now up a whole percent to 1%, and I am getting 40 bushels to the acre on that sandy knoll now. Maybe by the time Nathan is ready to take over, he'll get 100 bushels per acre.*



Jeremy Sahl and son Nathan check out NRCS publication, *Mighty Mini Microbe's Tale*.

### Larry Roohr, Burlington County, New Jersey



In 2017, Burlington Soil Conservation District (BSCD) offered funding to support the seeding of cover crop. The District acquired an Agricultural Soil Health Initiative grant funded by The William Penn Foundation and administered by National Fish and Wildlife Foundation. Larry Roohr took the District up on that offer. He was so pleased with results on the forty-eight acres of his operation that were seeded with a mix of rye, cereal rye, crimson clover, red clover and radish into a standing soybean crop that he contacted *The New Jersey Farmer* and invited them to send a reporter to his farm. (See page 13 for more on our partner's program.) He also enrolled an additional 86 acres of Windrush Farm in Southampton, NJ, in the EQIP Soil Health Initiative.

In August 2017, Larry Roohr told *The New Jersey Farmer*:

*The multi-species is what I liked. That worked out really well. I've been farming long enough to see it's working.*

### Mike Gross, Hunterdon County, New Jersey



Mike Gross is a third-generation farmer who has been no-tilling his property for ten years. He utilized the North Jersey RC&D aerial cover crop seeding program for the past several years on his Frenchtown operation. The aerial-seeded cover crops have shown great results the past couple of growing seasons. In 2018, Gross planted a seed mixture of Cereal Rye, Crimson Clover, Red Clover and Tillage Radish mixture.

An active part of North Jersey Resource Conservation & Development's Cover Crop Experimentation to Achieve Optimum Soil Health in New Jersey, a project funded through the NRCS Conservation Innovation Grant (CIG) program, Mike is managing a portion of his cropland with interseeding, drilling, high crop spreading and aerial seeding cover crops. He has also welcomed NRCS and RC&D to hold field days at his farm to showcase the work at the CIG plot. (See page 13 for more on our partner's program.)