

COVER CROPS, Cover Crops and MORE cover crops

November 2012



Annual Ryegrass roots can reach depths of 40 inches and address compaction issues.

Radishes, oats, and annual rye grass have one thing in common – producers use them as cover crops to improve their most valuable asset: soil. But do you know anyone using them? Livingston County, Illinois sees many producers giving cover crops a try. And they like what they see. With assistance from

the Natural Resources Conservation Service (NRCS) and the Livingston Soil and Water Conservation District (SWCD), cover crops are sprouting up all over the county.

Cover Crops Can Help

Cover crops provide multiple benefits such as:

- reducing erosion from wind and water
- increasing soil organic matter content,
- improving air and water movement through the soil,
- reducing soil compaction,
- capturing and recycling nutrients in the soil profile,
- managing soil moisture to promote biological nitrogen fixation, and
- reducing energy use.

By reducing nutrient loss from agricultural runoff, the County can improve water quality. These benefits go even further when you consider the County's streams feed into the Illinois and Mississippi River Basins, which affect millions of people, communities and water sources.



NRCS employees, Paul Youngstrum and Eric McTaggart, examine a cover crop radish.

Real farms. Real benefits.

Producers in this area realize the impact their farm has on their communities and beyond. That is why they experiment with new practices and find new ways to make their

farm more sustainable and build healthier soil and water. "Producers are beginning to see value in cover crops," said Eric McTaggart, NRCS District Conservationist. "Once they determine what specific issues or needs their operation faces—what they want the cover crop to do—then we help them select the ideal cover crop species or mix that addresses those needs."

Producer **Daniel Steidinger** read an article about cover crops four years ago in *Illinois AgriNews* and thought he'd give it a try. He planted radishes, which seemed to be a good fit for his operation. As a result, Steidinger successfully increased water infiltration in areas where water previously flowed across the field. The radish root depth aerated the area enough to pull water further down into the soil profile, instead of letting it run off the surface. "There was a 100 bushel difference in my field with cover crops and in a year like we had, that just speaks for itself." Steidinger planted his radish cover crop after wheat harvest.



Producer Daniel Steidinger tells NRCS employees his experience with cover crops.



Radish cover crops grow well on Steidinger's Livingston County farm field, despite the lack of significant rainfall during 2012.



Producers Danny and Kevin Harms experiment with different cover crops to solve specific crop needs.

Livingston County farmers **Danny and Kevin Harms** planted annual rye grass late last summer. This cover crop grows roots as deep as 40 inches. "We wanted something to pull nutrients up from deep down and bring them closer to the surface," stated Danny.

With its thick, fibrous roots, annual ryegrass does that and more, helping with compaction, water infiltration and nitrogen sequestration. Harms aerial-seeded the mixture of ryegrass and radish two weeks before corn harvest.



This year the Harms planted annual ryegrass and radish cover crops after corn.



Helping to break up compaction is exactly why Livingston County producer **Gary Steidinger** decided to add cover crops to his farm. "We are still experimenting. This is the first year we've tried annual rye grass and if it continues to help with compaction, we'll stick with it," he stated. Gary broadcast seeded ryegrass over the field in mid-September and incorporated the seed using a vertical tillage tool.

Producer Gary Steidinger tries cover crops to address soil compaction problems on his ground (above). Steidinger planted his first year of annual ryegrass and awaits successful results (right).



Working Together

Both McTaggart and Terry Bachtold, SWCD's Agriculture Resource Coordinator, work hard to encourage producers to participate in the Environmental Quality Incentives program (EQIP) and the Conservation Stewardship Program (CSP). Through these programs, producers may receive financial assistance to help with cost and installation of conservation practices.



Terry Bachtold introduced Ken Lehman who shared his story during a local cover crop tour.

According to Bachtold, "These producers are CSP participants and they have used cover crops for 2 to 3 years now. The results have been positive and we see other producers watching. Hopefully, even more producers here in Livingston County will give cover crops a try and find the same success."



Ken Lehman used the CSP to help him get started using cover crops.

Local producer **Ken Lehman** used CSP to introduce cover crops to his farm. "CSP is one of the best things SWCD and NRCS have come up with. I've learned a lot and want to try more on my farm."

EQIP and CSP are both voluntary conservation programs that encourage producers to address resource concerns by

improving, maintaining, or adding conservation practices. NRCS provides financial and technical assistance to eligible producers to conserve and enhance soil, water, air, and related natural resources on their land. To find out if EQIP or CSP is right for you or to learn more about cover crops, contact your local NRCS or SWCD offices or visit: www.il.nrcs.usda.gov.



Lehman successfully drilled a radish cover crop into corn stubble.