

Farmer Employs Natural Farming To Reap Benefits Of Soil

CONNIE LEINBACH
Berks Co. Correspondent
EARL TOWNSHIP (Berks Co.) — Not long after his fourth friend got sick from the harsh chemicals used to control bugs and worms, Leonard G. Stoltzfus decided to go natural.

"I watched a brother-in-law die of cancer and have seen neighbors and friends waste away (from the disease)," said Stoltzfus, a Douglassville R.D.2 dairy farmer. "I wanted to do something about it." He admitted that he used to feel "half sick" for a few days after using chemicals.

With a change in his thinking and in his agricultural program, Stoltzfus accomplishes without chemicals what he did with them five years ago while practicing monocropping. In essence, it's a return to the "old fashioned" way of farming — cultivating corn to get rid of weeds once the shoots appear, and rotating crops to control weeds and pests.

But it's a life-affirming method, he said.

Without chemicals, there should be 12 tons of microbial life per acre, he said. With chemicals, there's only two to four tons.

Since he abandoned the harsh chemicals that kill weeds and earthworms, he has felt better and has seen his earth return to the richness he sought using chemicals.

Besides, even more than one application of herbicide never got rid of the deep rooted weeds. Only a spike harrow can do that.

Stoltzfus will allow, however,

that he does use a biological liquid, called Restore, as a soil enhancer. It contains microorganisms that join the earthworms in the dark earth. It smells sweet, like cider.

Stoltzfus's cousin, Nevin E. Mast, Oley R.D. 1, however, uses no chemicals whatsoever. "The earth wasn't meant to have all these chemicals put in it," Mast said.

His wife, Audrey, said that when they used chemicals she noted that the bird population was reduced.

"Since we've been farming this way we've seen the barn swallows come back and gold finches," she said.

Both men are concerned with how the years of constant chemicals will harm the earth.

"We're among those concerned with potential pollution from the agricultural system," Stoltzfus said one warm Saturday on his 187-acre farm where he lives with his wife, Doris.

A simple system of rotation cropping is all that's needed to break the insect and disease cycle, he said, because the weed competition for each crop is different. Deep rooted plants draw different weeds than shallow rooted plants.

A mixture of alfalfa, clover, and hay in the hay field yields a highly nutritional grain without a weed problem, he said.

Time tillage is used to help control weeds, which are part of "the original curse," said Stoltzfus.

About the time that corn shoots in other fields are eight inches

high, Mast and Stoltzfus have just finished planting. After that, farming involves prevention.

Knowing the signs the soils shows makes him more in tune with the earth and its cycles.

He contends that his method is not more work than monocropping with chemicals.

"It's more fun," he said with a smile. "It's rewarding. It's the way the good Lord intended us to farm." Without chemicals, he said, earthworms have returned in abundance, and they are the key to soil health.

"After a rain, or early in the morning, I see a lot of earthworms," he said. The more earthworms, the healthier the soil.

Worms eat their way through the soil, never munching on plant roots, and deposit their castings as they go. The castings are richer than the soil itself, he said.

Earthworm activity aerates the earth, making it more crumbly and porous, thus able to retain water better.

No fertilizers are needed, he said, because as the earthworms aerate the ground, nitrogen from the air seeps in. Stoltzfus says he started his natural program skeptically, and experimented without chemicals on a 40-acre field. But after that first season, he was so impressed, that in two seasons he made the switch on all his fields.

Yields are about the same, he said, as is crop quality. Overall herd health of his 80 head of Holsteins has improved, he said, and his milk yields are average — but, then, he's not trying to be the top producer.

"Our soil tests have showed and crop yields prove we're not taking a licking," he said. "I'm excited about what I'm seeing in the soil." A test of the soil inventory done by The Pennsylvania State University lab showed Stoltzfus doesn't need to add anything to the soil.

"They said I could grow 150 bushels of corn per acre," he said. "Last year, we had the best corn crop around." Costs of this method of farming are not more expensive, he said. The costs of the chemicals actually exceed the extra labor cost needed to cultivate once the crops are planted, he said.

"But you don't go into it (natural farming) with (money) in mind; you do it for the environment," he said.

Stoltzfus didn't take any formal training in this method of farming. He learned what to do by reading some materials and by talking to other farmers.

CONNIE LEINBACH
Berks Co. Correspondent

Connie Leinbach lives in Douglass Township, near Boyertown. She divides her time between freelance writing and caring for her three children, ages 11, 3 and 1.

Before that, she worked for seven years as a reporter for the "Reading Eagle-Times." Her last assignment

there was covering the Berks County Court of Common Pleas.

As a cub reporter, Connie was "baptized into journalism by covering the Pennsylvania Farm Show for three years," she said.

She was born and reared in Berks County.



Leonard G. Stoltzfus, Douglassville R.D. 2., talks at his Earl Township farm about how he changed his farming methods from heavy use of herbicides and pesticides to natural methods.

A transition period is needed to make a complete switch from using chemical herbicides, fertilizers, and pesticides, he said. Though the switch can be completed in several growing seasons, it takes years longer for all of the chemicals to break down and disappear.

Stoltzfus illustrated his points about soil structure with a band of newly cut hay. He indicated a lumpy mass of soil, which he said was worm castings, around the base of a shorn plant. Pulling it up, he broke it apart and pointed out the tunnel through it, proving that earthworms were indeed doing what they are supposed to be doing.

He broke it apart, the brown soil crumbling easily through his fingers. Before, using chemicals, the soil was harder, and stuck together in layers, he said.

He raised the clump to his nose. "It smells sweet," he said. With chemicals, it smelled putrid. "If I'd put fertilizers on this earth now, the earthworms would all be dead," he said.

Stoltzfus relates a story that reinforces his belief in what he is doing.

He rents a field nearby that had been farmed for more than 20 years with heavy use of chemicals.

"You'd think after using chemicals that long there would be less weed pressure," he said. "But the

weeds were overwhelming." Gradually, he said, he is switching this field to natural methods.

Stoltzfus realizes that what he and his cousin are doing is a drop in the bucket, since all of the farmers around him continue to use chemicals.

But he is concerned about the ground water around here and he worries that the same thing is happening here as has happened in the Midwest, where farming with chemicals is intense.

There, he said, occurs the highest per capita instance of cancer.

"And farmers are the main offenders (of ground water pollution)," he said.

Still, he insists, it doesn't take a lot of effort for a farmer to change his way of thinking about how he makes his living.

"The biggest adjustment we have to make is right under our hats," Stoltzfus said. "You have to watch the weeds, know what's happening, think ahead." There's a spiritual aspect to his methods. Man may discover that trying to control the environment with artificial methods may eventually be harmful, he said. Stoltzfus has made a slide presentation which he has used to talk about his natural methods to the Young Farmers Association in Kutztown.

Farmers interested in learning to farm without chemicals can call Stoltzfus at (215) 689-5540.



Stoltzfus, holding a clump of soil, shows how the structure is crumbly and perfect for growing crops.



Stoltzfus, in his hay field, tells how his soil has become richer without the use of chemicals.

