

Ohio News Watch

Stewardship in drought

Margrafs keep topsoil in place

By GAIL C. KECK

WHEN Gene Margraf and his son, Bret, drive down the road in the winter, they like to see clean snow in the ditches. In too many places, ditches become dingy because of blowing soil from nearby fields, Gene explains. However, the roadsides just west of McCutchenville stay cleaner because of the Margrafs' conservation practices.

"When you come down the road in the winter and look at the ditches, they aren't brown," Gene points out. No-till farming practices and cover crops are helping the Margrafs keep their topsoil in the fields where it belongs.

Gene and his wife, Mary, along with Bret and his wife, Beth, farm 1,270 acres in Seneca and Wyandot counties, raising corn, soybeans and wheat. Everything is no-tilled except for spots they need to level after installing drainage or other conservation practices. No-till not only protects the soil, but also helps minimize operation of expensive machinery, Gene points out. "We've got a four-wheel-drive tractor, and we got maybe five hours on it this spring."

Although Gene grew up in town, he got started farming as a teenager by helping his grandfather and uncle. "I didn't like it in town, so I kept coming out here with my grandpa and my uncle," he explains. His uncle, Robert Margraf, was one of the area's no-till pioneers, planting no-till soybeans using a planter equipped with row splitters. By the late 1990s, the family was using no-till for corn, as well.

After Robert's death 10 years ago, Gene bought out other family members' shares



FLOW MASTERS: Bret and Gene Margraf rely on sub-surface drainage and sod waterways to redirect water and keep it from cutting a gully or running across a field.

of the farm. In recent years, Bret, who also works for the Seneca Soil and Water Conservation District, has been expanding his role in the family farm, renting additional land and adding equipment.

Whether they are farming land they own or land they rent, the Margrafs work to correct erosion problems, improve drainage and build soil organic matter. Even a small increase in organic matter can make a big difference in the soil's water-holding capacity, Bret notes. They use cover crops on all their crop ground to help boost organic matter, hold soil in place, and also trap and hold nutrients over the winter.

The use of cover crops and continuous no-till is making a noticeable difference in their fields, Gene says. Leaving the surface

undisturbed maintains the soil's structure, while roots leave channels open through the soil to allow better water infiltration.

"It's firmer, yet it does drain better," he explains. Those advantages were especially obvious last year during the wet harvest season, he adds. They were able to harvest soybeans and plant wheat without leaving nearly as many ruts as some farmers who used conventional tillage.

The Margrafs have also installed sub-surface drainage and sod waterways to redirect water. "Now instead of cutting a gully, it just runs down the waterway," says Bret. "If you give it a place to run, you keep it from running across the fields."

Bret has also installed drainage control structures on fields he fertilizes with liquid

By TIM WHITE

THIS year will be remembered for the extremely hot and dry weather that covered the state. Maps of the Palmer Drought Index showed red and orange for extended periods in Ohio. While some areas were certainly harder hit than others, few Ohio farmers were spared.

As *Ohio Farmer* visited the five families chosen to be the Conservation Farm Family Award winners for 2012, it was no different. Many have fields that will not produce a full crop because of the severe weather. Others have pastures that were stressed or hay fields that were parched without water.

However, all of these families have stories about how the conservation steps they have taken over the years helped prevent the worst-case scenario:

- Years of no-till and cover crops boosted the organic material in the topsoil of Gene, Mary, Bret and Beth Margraf's farm near McCutchenville.

- Gene and Jo Baumgardner also relied on no-till and covers, along with rotational grazing, to improve the soil on their farm near Jeffersonville.

- Joe Celuch and Brenda Butler saw a big rain on their farm near Frazeyburg, but instead of a washout, their thick and healthy pastures produced only clear runoff.

- Meanwhile, spring developments paid dividends for the cattle herd grazing the hard-hit rolling ground at Wayne and Mary McLaughlin's farm near Bremen.

- Conservation tillage benefited the dairy farm run by Davis and Bette Denman and their children and grandchildren near Cortland. Dry fields provided an ideal situation for injecting manure when they cleaned out the lagoons, too.

So often we write about the waterways and water and sediment control basins that help conservation winners deal with Ohio's abundant rains. Rest assured they will enjoy the benefits of those structures as the year goes on. But this year was a time of drought, and once again, natural resource stewardship proved to be the best way to deal with nature's extremes.

Please join *Ohio Farmer* in honoring these winning families at the Farm Science Review's Lawrence G. Vance Conservation Park on Sept. 20 at 11:30 a.m.

hog manure. The structures block tile discharge when manure is being applied to keep nutrients out of the streams.

Keck writes from Raymond.



BRENDA BUTLER AND JOE CELUCH

Couple values clear water

By GAIL C. KECK

ARARE rainstorm this summer clearly showed how Joe Celuch and Brenda Butler's conservation practices protect their hilly Muskingum County fields. Despite the downpour, only a little water ran off the rolling hillsides, and that water was clear. Solid stands of hay and healthy pastures help keep soil in place. Well-designed farm access roads and stream crossings also protect water quality.

"We can move cattle or hay whatever the weather without erosion," Celuch says.

Celuch and Butler farm about 400 acres, raising alfalfa, mixed grass and custom forage blends for hay. They also rotation-

ally graze a cow-calf herd of 85 cows.

The couple's farm includes land they own and land they lease from 21 different landowners. They arrange lease agreements for at least five to seven years, which allows them time to recoup initial costs for fencing, fertilizer, conservation practices and other improvements, Celuch explains.

"You can't do it year by year and invest what you need to make it work," he says. For instance, they've invested as much as \$600 an acre to improve nutrient-depleted soil to make it productive as hay ground.

Celuch and Butler have also improved their farm by building access roads using recycled concrete pavement and reclaimed asphalt pavement. They began

using recycled road materials in 2000, when they began building their operation. Then in 2009, they worked with engineers from the USDA Natural Resources Conservation Service and the Ohio Department of Natural Resources Division of Soil and Water Resources to change construction specifications to allow the use of reclaimed asphalt pavement for cost-share projects such as the Environmental Quality Incentives Program.

Another innovative idea Celuch and Butler have implemented is a combination stream crossing and watering trough. The concrete structure includes a stream-fed drinking pool that is cast in place, along with a concrete bridge to carry cattle and

vehicle traffic. The overflow pipes in the trough carry water under the bridge to the opposite side. During periods of high flow, water travels over the top of the bridge structure. The structure gives cattle access to the stream for drinking, but keeps them from standing in water or trampling banks.

Celuch and Butler recently finished fencing cattle out of all the creeks in their pastures, and the benefits have been even greater than they expected, Celuch says. For instance, the cattle had trampled some stream banks into bare ravines, but once they were fenced out, those areas quickly reverted to stable stream banks with natural vegetation. "Within six months, it healed itself right up," he says.