

BIO SOLIDS NEWS

News and Information from the Virginia Biosolids Council • August 2011

Campbell County Farmer Rebuilds His Soil

When Brian McGuire moved his young family from Kentucky seven years ago and purchased 1200 acres in Campbell County, he knew that the soil on the farm needed restoring. He also knew that biosolids could play a significant role in his use of natural methods to heal the land.



Brian McGuire stands in waist-high grass as his cows move to a new pasture for grazing.

Now, after struggling with four years of drought and years of delay in obtaining biosolids, McGuire is experiencing the fruits of his labors. His unconventional approach to healing the land has transformed the landscape into lush pastures with enough waist-high grass to sustain his 280 brood cows – which, in turn, produce about 270 marketable beef calves each year.

McGuire, who holds a degree in animal science from the University of Kentucky, raised beef cattle in Kentucky before coming to Virginia. He made the move because his Kentucky land was scattered across 10 farms and the Campbell County farm was one large contiguous property. He and his wife, Shannon, have three children.

On his Campbell County farm, McGuire avoids commercial fertilizers, which he says are expensive and just require greater and greater inputs each year, while doing

nothing to build up soil quality. “Biosolids,” he says, “work in a much more natural way because they are slow release, resist runoff and help build up the organic content of our clay soils. Biosolids also contribute phosphorus, which is needed by the soils in Central Virginia.”

Much of the grass McGuire grows in his pastures is never eaten by his cows, but gets trampled down, decomposes and creates a spongy layer of organic material that retains moisture and provides a habitat for earthworms and other beneficial organisms. Earthworms, he says, are vital to soil health by helping to maintain the proper pH.

To get this buildup of organic material, McGuire moves his cattle to a new pasture each day. As a result, his cows get to eat only the top parts of the grass before they move on to the next pasture. That top grass, which includes the grains, contains most of the energy in the grass, he says, which is what his cattle need.

He doesn't cut or bale his grass for winter feeding and is usually able to maintain a 90- to 120-day rotation schedule throughout the year. If necessary, he says would rather buy hay from other farmers in the winter, rather

continued on back...



Cows are almost hidden by the high grass in one of the pastures that have benefitted from biosolids.



The Virginia Biosolids Council supports the recycling of biosolids in Virginia through information and education about the beneficial use and safety of biosolids. The Council is supported by municipal wastewater treatment plants, land application and composting companies and biosolids users, and is available as a resource to those who need information about the recycling of biosolids.

Learn About Using Biosolids at the...

STATE*FAIR
OF VIRGINIA AT THE MEADOW

Visitors to this year's State Fair of Virginia will again have an opportunity to learn more about the wastewater treatment process and the generation and recycling of biosolids. For the second year, the Virginia Biosolids Council will provide information at its booth in the "Green" exhibit area, better known as the Commonwealth Hall.

Experts on water treatment and biosolids production and recycling will staff the Council's display during the day and be available to explain the science, safety and benefits of biosolids land application and composting. A special outreach will be available to student groups that visit the Green exhibit area as a part of school field trips to the Fair.

The State Fair runs from September 29 to October 9 at the Meadow Event Park at Doswell. Look for our booth (pictured right) – hope to see you there!



Visit the Virginia Biosolids Council booth at the State Fair of Virginia from September 29 to October 9.

VBC Supports Risk Communication Study

The Virginia Biosolids Council recently provided support to a two-phase research project assessing and evaluating strategic risk communications through outreach and dialogue for biosolids land application.

In Virginia, the VBC provided support to assess questions and concerns about biosolids land application...

Conducted by the Water Environment Research Federation (WERF), the study was designed to assess the support of developing stakeholder confidence through continued ongoing engagement and communication. In Virginia, the VBC provided support to assess questions and concerns about biosolids land application of near neighbors of permitted land application activity and of health professionals.

The research showed that, for the most part, stakeholders – which included health professionals and neighbors throughout Virginia – want to learn more about biosolids use and want the opportunity to discuss their interests and questions with biosolids professionals and

the farmers who choose to recycle biosolids. Critically important is the trust and confidence of professionals who produce, use and regulate biosolids recycling. The study showed that the majority of individuals included in the research are willing to support the agricultural application of biosolids, but want an appropriate amount of conversation and dialogue to address their questions with biosolids professionals or regulators.

More information about the study, "A Strategic Risk Communications Process for Outreach and Dialogue on Biosolids Land Application" can be found by contacting WERF at www.werf.org, or email the VBC at info@virginiabiosolids.com.

Campbell County Farmer (cont'd)

than cut his own hay and deny his land the organic and carbon content of the trampled grass.

In addition to producing about 270 beef calves for market each year, McGuire's unconventional approach also produces an environment that is attractive to a variety of wildlife, including deer, wild turkeys and other game birds. Part of his land is leased each year to a hunting club.



Virginia Biosolids Council
1011 E. Main Street, Suite 400
Richmond, Virginia 23219
www.virginiabiosolids.com