



erald Garber has been a dairy farmer in Virginia's Shenandoah Valley for 50 years. The farm he owns with partners Keith Wilson and Paul Wilson is located a mile from where he grew up in Augusta County. It is one of the largest dairy operations in the valley. Cave View Farms Inc. is 2,000 acres with 1,000 head of cattle, 500 of them milking. There are 1,700 acres in corn, soybeans, wheat and hay.

It has also become a model of conservation, particularly to improve the water affected by the farming operations. But Garber's efforts aren't solely because he, whose tongue-in-cheek practicality is evident upon first acquaintance, is an environmental conservationist. For him, the myriad conservation efforts he has instituted, many under state and federal programs, are about animal health.

QUALITY WORK. "It started with the ponds," he says of his first water-quality work. That early work expanded to include six miles of fencing along a tributary of the North River that passes through his farm.

The reason for Cave View Farms' water-quality work has always been the same. "People have farm ponds to water cattle, and we discovered they were disgusting. Heifers would get sick from being in them in hot weather, contracting mastitis," Garber explains. "Once we realized that, we decided to get them out of standing water."

The stream passing through the farm is part of the 64,000-square-mile Chesapeake Bay watershed. Home to 150 major streams and rivers, and 17 million people, states across the watershed region have committed to reducing the nutrients entering the water system.

FOCUS ON FENCES. Garber found help from Robert Whitescarver, a contractor for the Chesapeake Bay Foundation. "Getting all the streams

fenced was Bobby's life dream," Garber says with a chuckle. "Everybody's got a different reason for fencing the streams, but with us, it started out about animal health."

The stream bank will repair itself quickly. "The problem is the constant churning created by the grazing animals and the subsequent erosion of the bank. It also creates a lot of sediment," Garber explains.

In addition to fencing off the streams, Garber and his partners have also added wide filter strips to protect the stream from runoff and erosion in case of a catastrophic environmental event. "You will have heavy rains,"



Gerald Garber, of Cave View Farms (left), and Robert Whitescarver, of the Chesapeake Bay Foundation, have worked to make the dairy a model of waterquality protection in the giant watershed.

he says, "and that water's got to go somewhere."

Whitescarver says Garber and the Wilsons have been proactive in stream bank fencing, having taken advantage of the USDA Farm Service Agency's Conservation Reserve Enhancement Program (CREP) and the Virginia Agricultural BMP (Best Management Practices) Cost Share and Tax Credit Programs. These programs and others offer producers 50 to 115% reimbursement for stream bank protection initiatives, depending on the program and the size of the buffer.

"Cave View has also done a lot of things on their own, too," Whitescarver adds.

Why? Garber answers the question with a question. "I was in a hurry. Have you ever worked with the government?" he asks.

STREAM BANKS. Cave View Farms' stream banks are more pristine than some you'll see in national parks, green and cradling clear water. In 2010, the farm received Virginia's Clean Water Farm Award. Garber is also looking into a program offered through the Headwaters Soil and Water Conservation District that pays producers \$1 per foot for every section of stream they have already fenced or fence on their own in the future.

"Each state that is part of the Chesapeake Bay's watershed had to produce a plan to prevent nutrients from getting into the Bay," Whitescarver explains. "In Virginia, that plan was stream bank fencing."

Garber has placed concrete waffle slats at every stream crossing to prevent churning up sediment when vehicles and farm equipment cross. He also installed sod crossings over culverts for cattle. Animals never enter or drink directly from streams.

Whitescarver says Virginia farmers can take advantage of as many as eight programs to help them exclude cattle from streams. For example, the programs that helped pay for fencing also paid for water-capture devices or pumping systems that take water from the stream to cattle waterers.

Every farm along the tributary feeding through Cave View Farms has its stream banks fenced off from livestock. Quite a victory, Whitescarver says. In Virginia, CREP is the only program that pays farmers rent for land pulled out of grazing or production. Currently, in Augusta County, producers receive \$93 per acre per year.

PADDOCK SYSTEM. Garber says he enjoys a nice side benefit from the stream fencing projects, too. It resulted

benefit from the stream fencing projects, too. It resulted in the creation of a rotational lot system with the help of the Augusta County Extension Service. There are up to 30 paddocks, 5 to 20 acres each. The cows move through them in a one-week rotation.

"Our rule here now is if you can see a footprint, the gate needs to be closed," Garber says. "We don't wind up with any bare lots." And Garber isn't kidding. You won't see his dairy cattle in any mud lots. If the weather would result in grazing tearing up the grass and soil, the cattle stay inside in a loose housing facility where the alley is scraped four times a day, and the mattresses are bedded twice a week and cleaned twice a day. "The cattle are in an absolutely clean environment," he says.

Garber also keeps cattle inside during calving and for at least three weeks after. "We don't have any giving birth in snow and mud," he says. "The calving barn is designed for total comfort of the cattle and the operators." Both the loose housing facility and calving barn were built with the help of Environmental Quality Incentives Program (EQIP) and the Headwaters Soil and Conservation District. Generally, the cost for this work is split, with 75% paid by the government agency and 25% paid by the owner.

Cave View Farms also practices no-till farming and contour planting on the hills. Crops run perpendicular to the water runoff, which now occurs down grass waterways. Some of Garber's row crops run in fields that are three-quarters of a mile long to accommodate the farm's equipment. "You can have a big farm and still practice conservation," Garber says. "Size is not relevant to ecology. Attitude is."

For More Information

Robert Whitescarver says producers should be aware they can often "piggyback" programs, meaning they can get funding from more than one state and federal program to finance a single conservation project. To get started, he advises growers to contact their local USDA service center or local soil and water conservation service.

Visit offices.sc.egov.usda.gov/locator/app to find the appropriate office in your state.