Cover Story
Protecting the Land Through Environmentally Sound Farming
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Respecting the Land

with Efficient Nutrient Applications Using Zimmatic Center Pivots
Innovation Unites
With Environmentally Sound Farming

With a long family history of using soil conservation practices, it was no surprise that Sarem Farms, Inc., part-owner Bundy Lane would stand out as a clear champion to be honored with the Pork Industry Environment Steward of the Year Award in 2003. The award is well-known for recognizing pork producers with environmentally sound business practices.

An innovator at heart, Lane is an eighth generation farmer in northeastern North Carolina and a graduate of North Carolina State University. In the family farming operation Lane is president of Sarem Farms and manager of the sow operation, which was started in 1996.

"When we chose to be environmentally sound, we decided to design our lagoon using the latest technology," says Lane. The innovation incorporated on the sow farm included an environmentally sound approach to manure management, with special attention to odor abatement to ensure proper biological activity in the lagoon. The lagoon's function and biological activity have led to an almost undetectable odor from the lagoon. The irrigated lagoon effluent has essentially no odor.

Realizing the need to ensure minimal runoff, Lane chose to use Zimmatic® center pivots as part of the business plan. He was introduced to Zimmatic and GrowSmart® products by Billy Gillam of Gillam and Mason, Harrellsville, NC, in 1998.

Lane’s 4,880 sows are housed on 700 acres (283 ha) in tunnel ventilated, pit recharge buildings, which are connected to a two-stage lagoon system. His remaining farmland consists of 375 acres (152 ha) of forest and 325 acres (132 ha) are used to grow peanuts, cotton, corn, soybeans, wheat, fescue pasture and Bermuda pasture with nutrients from the two-stage lagoon. The lagoon effluent is applied to crop and pastureland with two center pivots and one traveling gun. All effluent applications are made by Lane and managed in an effort to get the optimum use of both nutrients and water to grow better crops.

All of the pivots at Sarem Farms are equipped with automatic shutdown valves, ensuring no overapplication during an unscheduled event—a huge benefit when dealing with safety issues. "If there is ever a problem, the pump automatically shuts down. This is a lifesaver for us," explains Lane.

"The computer controls on the pivots are easy-to-use and allow us to precisely control our applications. They allow me to sleep at night."

~Bundy Lane

Lane says the computerized controls on the pivots allow for precise application and remote control and monitoring. "The pivots, which can be operated from remote locations, are linked to a single channel radio system, allowing us to constantly monitor the lagoon from anywhere on the farm."

According to Lane, the pivots also offer a huge benefit in labor savings. Without the pivots, he says he would need to employ at least three employees to cover the area of land and monitor the nutrient applications every two hours.

"The computer controls on the pivots are easy-to-use and allow us to precisely control our applications," says Lane. "They allow me to sleep at night."

In addition to using Zimmatic products, Lane has incorporated SoilMAX Track Packs, a GrowSmart product that maintains the aggregate structure of the soil, not only minimizing particle breakdown, but also increasing the infiltration ability of the soil. This action minimizes puddling in the tracks and reduces soil erosion.

Sharing Innovative Ideas

With his farming and pork producer...
Nearly 5,000 sows are housed in tunnel ventilated, pit recharge buildings.

SoilMAX Track Packs help reduce wheel tracks and erosion at Sarem Farms.

business on track, Lane shares his passion for environmental issues with others by serving as Chairman of the Environmental Committee of Frontline Farmers. He is also the only farmer on the Technology Panel overseeing the research into alternative technologies by North Carolina State University.

Frontline Farmers, initially comprised of a small group of dedicated hog farmers, has evolved into a statewide organization interested in protecting the future for producers. “We needed to put a face back on hog farmers. People were losing sight of who we are and what we do,” says Lane.

The goals of Frontline Farmers include speaking to environmental groups and assisting in funding environmental research projects, with the majority of time spent educating other farmers. Additionally, the group has initiated pork producer representation within legislative groups.

“We had people who had never been on a farm making decisions on our behalf. Now, we can provide insight as to how pork producers run their farms,” says Lane.

The up-and-coming focus for Frontline Farmers is to investigate alternative technologies that will benefit producers and the land, according to Lane.

The future of Sarem Farms is promising as a result of smart business decisions and the family’s belief in respecting the land. “We plan to be as efficient on every acre/hectare we own and be as productive as possible. These pivots allow us to accomplish our goals.” Lane plans to install three more low-pressure center pivots in the next two years.

~KEY POINTS~

- Lagoon effluent is applied to 325 acres (132 ha) of peanuts, cotton, corn, soybeans, wheat, fescue pasture and Bermuda pasture.

- Zimmatic pivots provide a huge labor savings.

- Bundy Lane was honored with the Pork Industry Environment Steward of the Year award in 2003.

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