

ENVIRONMENTAL STEWARD OF THE YEAR winner

The farming partnership of Pat and Kristin Duncanson and Karl and Jackie Duncanson derives its environmental, livestock and cropping choices through research, study and analysis.

It's a decision-making process that is anything but an insulated vacuum. In fact, the "D" in Duncanson could also stand for discussion, determination and darn-good common sense. It's these traits that have earned Duncanson Growers of Mapleton the Minnesota Pork Industry's 2010 Environmental Steward of the Year award.

Duncanson Growers' environmental practices have also been recognized by their Soil Water Conservation District and by Top Producer magazine.

The Duncansons are involved in several swine production systems, including the finishing of hogs on contract and receiving feeder pigs for finishing from a sow unit in which they are shareholders. In addition to crop production, they have finished beef cattle as well as contract finished Holstein steers.

Brothers Pat and Karl grew up on a farm near Mapleton where their 82-year-old mother Mary continues to live and maintains an active interest in the farming operation. They describe their father, Dale, who passed away 11 years ago, as a terrific teacher, great learner and an innovator. Their parents' example ignited their own passions to farm and the family's goal is to lay groundwork for another generation of Duncansons to be livestock and crop producers.

Spouses Kristin and Jackie are full-fledged farming partners whose jobs include field work, business administration and agricultural advocacy at local, state and national levels. The importance of farmer input and their understanding of the legislative process have led both to actively use their communication and leadership skills on regulatory boards and agencies.

To achieve a viable farming operation, Duncanson Growers believes that profitability and sustainability go hand and hand.

Their management practices include detailed manure nutrient plans for their crops, soil fertility improvement

through soil conservation, and outside consultants to assure they meet environmental and financial goals.

"To succeed in agriculture requires economically and environmentally sustainable practices while coexisting with Minnesota's valued natural resources," Pat said.

They based the site selection of their swine finishing barn on proximity to their fields for two reasons: first, to better utilize the manure nutrients from the deep-pit barns on their cropland, and secondly, to conserve fuel and labor costs by eliminating unnecessary travel during application. Prior to barn construction, the Duncansons would haul their manure several miles to gain the fertilizer benefits of manure on their cropland.

"Before it was even fashionable, we were hauling manure quite a distance for our crops," Pat said. "I'm very proud of how far our industry has come in our management of manure."

Duncanson Growers utilizes a manure management consultant to assist with application planning. They annually sample pits and apply in fall. Application equipment is calibrated to assure rates match soil needs for the following season's crops. The Duncansons own and share manure application equipment and, when necessary, will hire custom applicators.

To improve farmland productivity and reduce soil erosion, Duncanson Growers invested in tile drainage to solve several conservation issues. The environmental benefits from tiling resulted in faster warming soils in spring so they could maintain higher residue levels throughout fall and winter, adoption of low-tillage cropping systems and soil stabilization to prevent gully washing. The project also included replacing several open tile inlets with blind intakes to further reduce soil and nutrient movement from the fields.

Manure application rates are determined by soil phosphorus and potash levels. If necessary, they will apply commercial nitrogen to meet crop needs. Through data collection and third-party analysis, Duncanson concluded that crops on the better drained soils have more predictable fertilizer utilization and have more efficient nitrogen uptake for positive yields.



Kristine and Pat Duncanson



The partners of Duncanson Growers, Pat, Kristine, Jackie and Karl, were recently recognized by Top Producer magazine.



As a way to evaluate their management decisions at an individual field level, Duncanson Growers uses a financial consultant to analyze all farm accounts, production records and marketing outcomes. The analysis includes manure nutrient contribution to crop yields, as well as demonstrating crop production benefits from improved drainage.

Duncanson Growers is now entering a new stage of production agriculture by participating in and encouraging a watershed-wide plan that involves municipal storm water runoff, soil erosion and sedimentation reductions, and farmland productivity improvements. The project, named County Ditch 57, encompasses 6,000 acres, 57 landowners, the city of Mapleton, private engineers, county ditch manager and the Minnesota Departments of Agriculture. It is supported by the Minnesota Department of Natural Resources and the University of Minnesota.

In very simple terms, this complex project involves sediment basins and grass buffers to collect and slow water flow. By creating a series of storage areas the County Ditch 57 project will improve water quality while producing wildlife enhancement opportunities.

“We are not seeking faster drainage but smarter drainage,” Pat said. “We are promoting an alternative to a bigger drainage pipe. We view the Ditch 57 project as a model for increased production while maintaining sustainable, environmentally-appropriate drainage.”

Karl and Jackie’s son Karson works on the farm while attending college. Other children include son and daughter-in-law, Kameron and Abby, daughter Justine and son Jordan. Pat and Kristin’s children are Ben, Claire, Sam and Gabe.

In January, Kristin will begin serving on the Minnesota Environmental Quality Board, which coordinates environmental activities of major state agencies. She is a Minnesota Agri-Growth Council board member, chairs the Governor’s Biodiesel Task Force and is a member of the National Ag Carbon Market Working Group. Jackie is a member of the Minnesota Horse Racing Commission, served 12 years on the Minnesota Pollution Control Agency (MPCA) Citizens’ Board where her input influenced the agency’s environmental permitting process, and was a Minnesota Beef Council director.

The Duncanson families volunteer their time for several community organizations: curling club, churches, school board, and an annual Scottish heritage and Robert Burns’ poetry celebration. They are active in farm and commodity organizations, farmer-learning groups and other educational programs to further their agricultural knowledge and improve their farm management practices.

Environmental Steward of the Year Award Sponsor: Balzer Inc.



Brothers Pat and Karl Duncanson strive to continually improve environmental stewardship practice on the families’ livestock and crop operations.

