

Farming Smarter to make research pay

What's the best way to fund local research when the usual sources dry up? This research group has new ideas

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By Jeff Melchior

By keeping its efforts limited to southern Alberta, Farming Smarter, a farmer-led applied research and extension service, is proving it can respond quickly to local crop producers' immediate needs.

“We're focused on creating opportunities and dealing with issues that farmers themselves face,” explains general manager Ken Coles.

“It's about crop producers saying, for example, ‘We need something to help us with a pest problem right now; how do we tackle that with the immediacy required to stay in business?’ I think we play a short-term role — a really practical, usable research piece with less emphasis on the exploratory side of research.”

Led by a board of directors consisting mainly of farmers, the Lethbridge-based non-profit is built on the recognition that southern Alberta is a region with unique needs that aren't always met by more generalized research, Coles says.

“There are different requirements and intricacies involved in the region based on soil type, weather patterns and skill sets. The majority of irrigation in Canada is in southern Alberta, so there are some very region-specific opportunities.”

The organization's approach differs in some ways from prevailing philosophies around ag research. Coles says agriculture might be skipping a step by going headlong into precision agriculture without adapting data to regional conditions.

“I think there is a lot of fine-tuning that can be done regionally. There is a lot of data being generated but sometimes it's garbage-in, garbage-out.”

Hail simulator and night spraying

Formed in 2012, Farming Smarter taps into the greater world of southern Alberta agriculture through its extension events and communications tools. Its research is often conducted through partnerships with organizations such as the AAFC Lethbridge Research and Development Centre.



Farming Smarter general manager Ken Coles operates a hail simulator designed to test the effects of “rescue products” for recovering from hail damage. *Photo: Farming Smarter*

Farming Smarter recently developed a hail simulator to study the efficacy of several crop products which claimed the ability to rescue crops damaged by hailstorms. The three-year study was conducted in co-operation with Alberta InnoTech and SARDA Ag Research.

“There was a farmer who came to me and said he had some hail damage. He had several companies trying to sell him what we call ‘rescue products.’ They were fungicides or nutrient blends that companies claim can reverse the effects of hailstorm damage. He didn’t know if they worked or even how to test them,” Coles says.

Similar to a World War Two minesweeper, the hailstorm simulator is a rotating shaft placed on the front-end loader of a tractor and outfitted with several two-foot lengths of chain. As the chains hit the ground they simulate the terminal velocity of hailstones hitting wheat and pulse crops.

The rescue products were applied under various levels of crop damage. The basic takeaway, says Coles, is they had little to no effect on hailstorm-damaged crops.

“There was the odd time we did see some response but eight times out of nine we did not see a statistical response.”

Another of Coles’s favourite projects is Farming Smarter’s night-spraying research from a few years ago. Researchers applied crop protection products at different times of the day and night to discover the best time to spray.

“This was at a time when farmers were quickly adopting spraying at different times of the evening because now they could. We ended up coming up with some results that were easily adopted and made a difference on the farm.”

Noting that the results were very southern Alberta-specific, Coles says probably the biggest surprise was that the worst time to spray is first thing in the morning — a common practice among farmers trying to beat southern Alberta’s notorious wind.

“In some cases we saw as much as a 20 per cent difference in efficacy,” he says. “We had an extension event to talk about the results. It ended up being one of our most popular events.”

“See and feel” approach

Like many organizations today, Farming Smarter uses a combination of media to report on its research activities. With its website farmingsmarter.com serving as its central communications hub, the organization publishes monthly newsletters and puts videos on its YouTube channel. It also has a social media presence on Twitter, Facebook, Instagram and LinkedIn.

While all these tools are important, it's Farming Smarter's live, in-person extension events that are considered its communications bread-and-butter. These events — which include field schools, plot hops and an annual conference — embody the “see and feel” approach that helps producers internalize the research results and apply them to their own farm, says assistant manager Jamie Puchinger.



The events become learning days for the organization's staff as well.

“These events represent our needs assessment,” she says. “They give us the first-time opportunity to talk to producers about what's happening on their farms, what they are seeing in the fields, what is important to them today, what they need answers to, what they have questions about.

“All this helps us dictate what we apply for in our research projects. If it's a major issue in southern Alberta then we can go ahead and put in a funding application to study it and learn more about whatever the issue is. Our extension programs feed our research program.”

Paying the bills

Coles says extension events are expensive but also crucial to Farming Smarter's core objectives. These programs depend greatly on industry sponsorship. The problem is there is less industry to go around.

“There has been a tremendous amount of amalgamation in the last couple of years, so where we would have two sponsors last year we might have one sponsor this year,” he says.

Puchinger sees it too. “Changing priorities, loss of government grants and reduced budgets for crop commissions are also impacting support for regional activities and extension programs,” she says.

A constant job is to chase down opportunities and form strategies to keep its research and extension activities sustainable. Now, there is some funding light on the horizon. The Alberta government recently announced its intention to step back its role in production research in favour of what it calls “farmer-led research.” Although Coles laments any loss to ag research, he thinks Farming Smarter's grassroots approach may suit the government's vision.

“It definitely means more of a focus on applied research — something that is usable for the farmer rather than discovery-based research where you maybe spend 20 years in a lab,” he says.

If getting funding from government is tricky, getting producers to pay for Farming Smarter's services is even trickier. They're trying to innovate — last summer Farming Smarter introduced a set of

Assistant manager Jamie Puchinger says connecting with farmers at extension events is key to determining Farming Smarter's research agenda. photo: Farming Smarter

premium packages which included discounted tickets to extension events plus access to premium information — but so far they have not had a lot of success with this approach.

“People have gotten used to getting information for free,” Coles says.

The organization is currently putting together a subscription-based affiliate marketing plan — a bridge, says Coles, between ag businesses, subscribers and Farming Smarter.

“We are going to approach 10 exclusive partners such as equipment companies and give them opportunities to promote themselves to our clients. In exchange, we are asking that each business provide subscribers at least a \$1,000 discount on the product and services they are selling.

“If we had 10 companies, the subscriber has an opportunity to get \$10,000 in value from those business partners. The information and event access Farming Smarter provides ends up being a bit of a bonus.”

Coles’s goal for the program is to sign 400 subscribers per year within five years. “It’s brand-new and we haven’t fully polished it up, but I’m kind of excited to give it a go and see how we make out with it.”