

Red River Valley connections

Extension addresses issues that cross state lines with a spirit and system of collaboration

Formed by the glacial Lake Agassiz, the Red River Valley spreads across the border of Minnesota and North Dakota. The fertile soils create a rich bed for crops, making agriculture the top employer and economic driver. Research and education about threats to those crops keep the region healthy, benefiting the economy and environment of both states.



By staying on top of issues, Extension helps farmers learn about threats. Pictured: Andy Robinson (left), U of M Extension and NDSU Extension potato specialist, with Justin Dagen, potato grower from Karlstad, Minn.

As the sun rises over Justin Dagen's potato field, farmed by his family for 134 years, Dagen finds three tiny insects stuck in his liquid aphid trap. He seals the container and mails it to the University's



Ian MacRae, U of M Extension entomologist, (right) with Andy Robinson, U of M Extension and NDSU Extension potato specialist.

Northwest Research and Outreach Center in Crookston. At this moment, other growers throughout the Red River Valley are doing the same thing.

Soon after, Andy Robinson, a potato specialist who works for both University of Minnesota Extension and the North Dakota State University Extension Service, sends the growers customized reports containing information they need to make precise management decisions that protect their crops while conserving resources.

Data drives action

The Red River of the North physically divides Minnesota and North Dakota. Moorhead and Fargo are often considered twin cities, forming a cultural and economic center. A variety of crops are grown on both sides of the river besides corn and soybeans. The region also ranks high in potatoes, sugarbeets, canola, wheat and other small grains.

Robinson and two other specialists hold positions shared between the Extensions of

both North Dakota State University and the University of Minnesota. As dual-state researchers and educators, they respond to challenges on both sides of the border. That's because, for example, if the aphids found by Dagen are the type that serve as a vector for the crop-robbing Potato Y virus, both sides of the river may suffer if growers don't act.

"Growers have to be vigilant, and they need data," says Robinson. He formulates recommendations based on real-time data provided by Ian MacRae, U of M Extension entomologist. MacRae studies the aphid situation, using strategies from a simple jar trap to advanced drone technology. Understanding what types of aphids are active at what levels helps farmers know when and how to treat, as well as when not to take action. The goal is to prevent crop damage, but with fewer chemicals.

"The Potato Y virus is just one of our challenges," says Dagen. "There's also flood, drought, blight, fertility issues and Colorado potato beetles. I rely on Extension for help with all of these, and it's always a moving target."

Sweet history, strong future

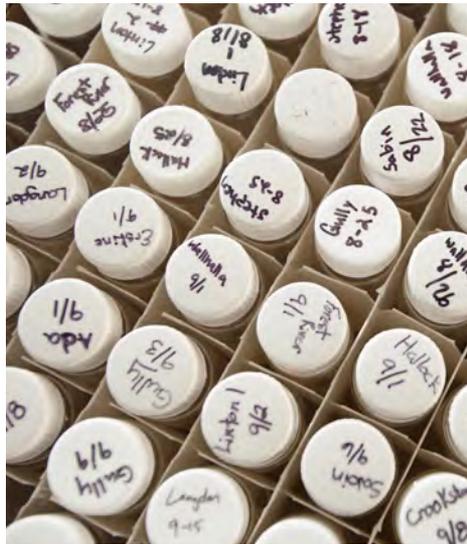
A variety of Extension positions have been shared across this border since the late 1960s, beginning with sugarbeet specialist Alan Dexter, who addressed weed control problems facing the region's growers.

"Now, more than ever, sugarbeet growers deal with production challenges like weeds and diseases, but they don't want to manage these at the expense of the environment," says Tom Peters, weed specialist. Peters and Mohamed Khan work with sugarbeet growers in both states.

"Sugarbeet growers contribute funding for shared positions because they provide effective, practical science-based solutions," says Tom Knutsen, vice president of Minn-Dak Farmers Cooperative. "They don't say, 'You have to do this.' Extension specialists say, 'Here's the science, and I hear what you're saying too. Now let's find a road map.'"

"This way of working across the border is successful in the Red River Valley, where our two states form such a tight community," says Betty Younggren, a Kittson County commissioner who serves on the county's Extension committee.

"Kids from both states play hockey together and take swimming classes together," adds Younggren. "So it just makes sense to work together on the issues most important to our future."



Extension helps farmers understand challenges such as insect pests, weeds and plant diseases to protect all types of crops. Crops in the Red River Valley include potatoes, sugarbeets, canola, wheat and other small grains, as well as corn and soybeans.

Red River Valley at a glance

- No. 1 Employment sector: Agriculture, forestry, fishing & hunting
- No. 1 in Minnesota for crop cash receipts: Polk County
- Sugarbeet acres in region: 600,000
- Top-producing region for red potatoes in nation

Giving back through leadership

Thirty years ago, Extension, local advisors and supporting organizations created the Red River Valley Emerging Leaders Program. The program creates and sustains a network of community leaders focusing on agriculture, natural resources and other issues. More than 1,000 individuals have participated, completing four main goals:

1. Develop an understanding of self and community
2. Build skills in leadership and relationships

3. Broaden understanding of complex issues and legislative processes
4. Set personal goals to "give back" to their community

"We have a new group every year, and it's always exciting to see where their path takes them next," says Jody Horntvedt, Extension educator in leadership and civic engagement. "Hundreds of alumni today are working on local issues, serving as leaders in state commodity groups, and representing Minnesota on national boards."



Even the smallest communities can remain vital with the engagement of residents like Christina and David Lien, Red River Valley Emerging Leaders alumni from Flom, Minn.