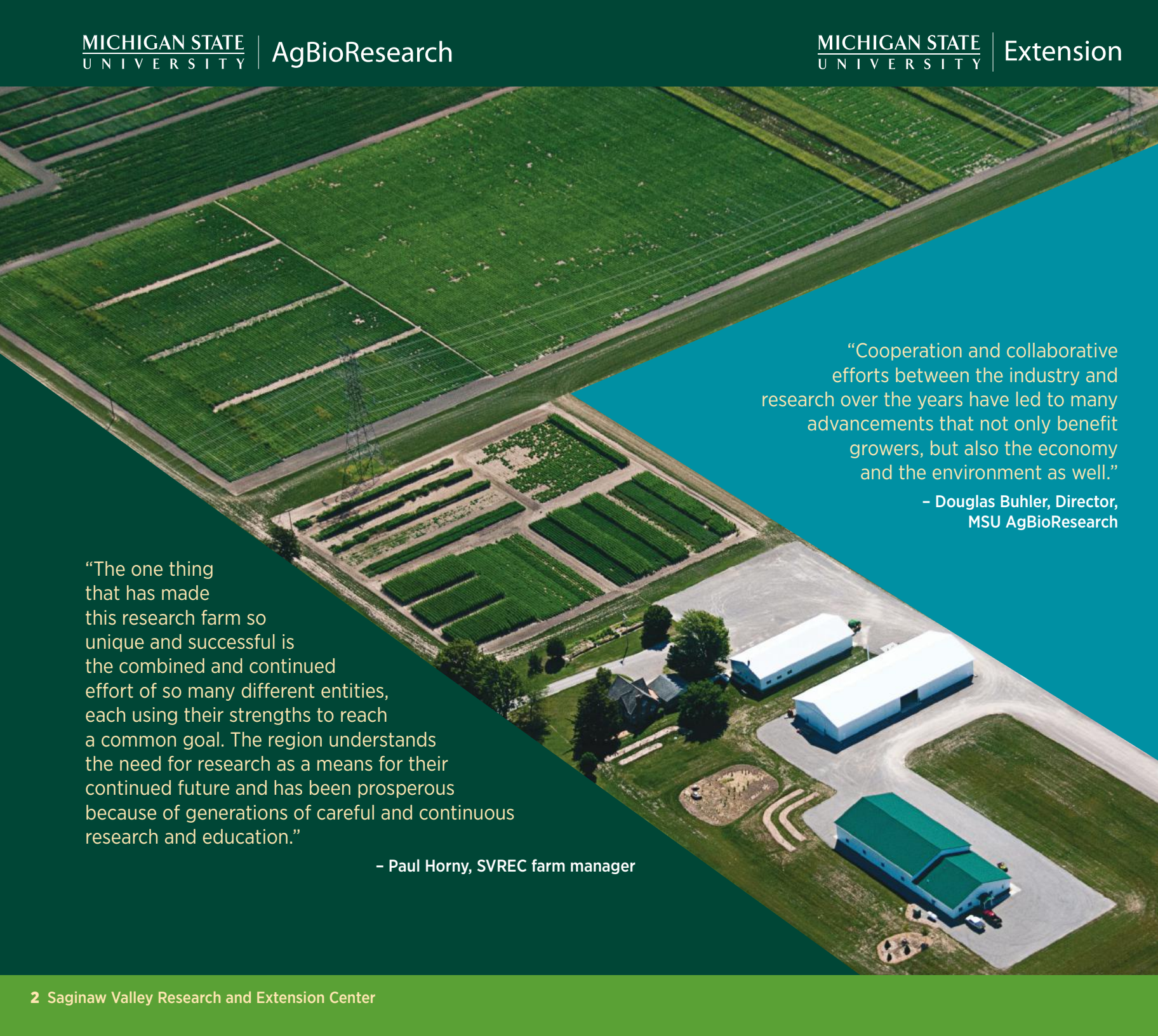


# SAGINAW VALLEY

# RESEARCH & EXTENSION CENTER

- PAST
- PRESENT
- FUTURE





“The one thing that has made this research farm so unique and successful is the combined and continued effort of so many different entities, each using their strengths to reach a common goal. The region understands the need for research as a means for their continued future and has been prosperous because of generations of careful and continuous research and education.”

– Paul Horny, SVREC farm manager

“Cooperation and collaborative efforts between the industry and research over the years have led to many advancements that not only benefit growers, but also the economy and the environment as well.”

– Douglas Buhler, Director,  
MSU AgBioResearch

# Saginaw Valley Research & Extension Center

**T**he Michigan State University (MSU) Saginaw Valley Research and Extension Center (SVREC) has served farmers in the Saginaw Valley since the early 20th century, conducting research that has helped farmers increase productivity, profitability and sustainability. The partnership between sugarbeet and bean growers, the processors and MSU has remained strong through farm relocations and industry mergers thanks to the cooperative efforts of active advisory boards.

With much of the state's sugarbeet and dry bean production located in the Thumb and the Saginaw Valley region of Michigan, research conducted at and associated with the SVREC provides growers with accurate, economically relevant knowledge that has helped keep Michigan in the top

five in both dry bean and sugarbeet production nationwide. Both crops contribute hundreds of millions of dollars to the state's economy each year.

## Where it began

It all started in the early 1900s at the Ferden Farm located on Ditch Road in Chesaning, Michigan. MSU used the Ferden Farm as the regional research farm for dry beans, sugarbeets and related crops – corn, wheat, oats, alfalfa and soybeans. During the early years, MSU professors, technicians and students introduced fertilizer, hybrid seed corn, soybeans and tractors to the area. MSU county Extension agents shared the research with farmers throughout the growing region.





Limited acreage, disease from lack of crop rotation and poor drainage were major issues on the Saginaw Valley Bean and Beet Research Farm. One year, all of the research was lost to flooding. “You can’t have these problems at such a critical farm for the industry. MSU and the industry were looking to expand the existing location and the farm advisory board decided it was time to relocate the farm.”

– Ray VanDriessche,  
Michigan Sugar Company

## A farm on the move

The Ferden Farm was closed in the late 1960s and for a few years, no research took place in the region. Soon after the closure, an advisory group of growers, MSU representatives and industry members was formed to locate a new site closer to the growing region so that research could be conducted in a place where soil and weather conditions were similar to what farmers in the area faced. The Michigan Bean Commission, the Michigan Bean Shippers Association, Michigan Sugar Company and their grower associations, and Monitor Sugar Company and their grower associations purchased in equal portions the new 120-acre farm, located just west of Saginaw on Swan Creek Road. These purchasing entities along with the Saginaw Valley Bean and Beet Research Advisory Board, MSU, the United States Department of Agriculture (USDA), and industry scientists and educators handled the oversight of the Saginaw Valley Bean and Beet Research Farm. The dry bean and sugarbeet industries employed their own research groups that also conducted research at the farm, with the dry bean industry research director housed at the farm along with the farm manager.

## World-class research

Researchers at the Saginaw Valley Bean and Beet Research Farm were integral in introducing new technologies and varieties of bush beans – an improvement over prostrate growth beans. Growth habits of dry beans were further improved to consist of an upright short vine that can be direct harvested instead of being pulled and windrowed. Dry bean harvest technology has continuously evolved, from knife pullers and windrowers to rod pullers and windrowers, and eventually to direct cutting with combines. Each new technology included its own development research and education. Disease and drought tolerance was also greatly improved, leading to yield increases and profitability.

The introduction of herbicides helped reduce time spent cultivating the crops. Sugarbeet producers saw improvements through hybridization, adding traits that could be brought in and evaluated to improve disease resistance, root shape, sugar content, yield and profitability. In the 1990s, genetically enhanced and later

genetically modified soybeans, corn and sugarbeets were introduced at the farm, simplifying herbicide choices and decreasing the numbers of trips across the field. Major shifts in fertilizer and insect and disease technologies were also discovered during this time.

The "Bean and Beet" farm served the sugarbeet and dry bean industry for more than three decades, but much like the Ferden Farm situation, many dry bean and sugarbeet farmers were no longer farming in the area. Additionally, crop production acreage was limited at the location, plant disease issues were occurring, and flooding and deer from a nearby game reserve plagued the farm.

## Finding a permanent home

After several spirited deliberations about whether to expand the Saginaw Valley Bean and Beet Research Farm or find a new farm, the advisory board decided to relocate the farm. It took 10 years of meetings and countless tours of new sites before the board decided on a 250-acre farm at the current location on Reese Road in Frankenmuth, Michigan, which was double the size of the former farm. Field research ended at the Saginaw site in fall 2008. The following year, research began at the new site.

Most of the dry bean and sugarbeet production in Michigan is located in the Thumb and Saginaw Valley region of Michigan. Research at the center allows Michigan producers to be national leaders in sugarbeet and dry bean production, offering growers the latest knowledge about pest and weed control, new variety trials, crop management and tillage techniques. In addition to dry bean and sugarbeet research, the farm performs studies on crops that dry bean and sugarbeet producers would normally use in rotation such as corn, wheat and soybeans. Having more land allows the utilization of rotational crops, which cuts down on diseases and soil depletion that can arise when growing the same crops year after year.

The current SVREC is located on lakebed soils – the same soils as on the farms the center serves. These soils are flat and heavy with fairly uniform fertility. The climate in the region is moderated by the surrounding lakes, making it ideal for bean and beet production.

During an after-meeting discussion with local farmers Wayne Hecht, Charlie Bauer and Gene Meylan, and SVREC farm manager Paul Horny, the group looked over a plat map for large single-owner parcels. "Wayne and Charlie looked at each other and said, 'What about that piece of ground?' by the next fall we owned it. They knew the local situations that helped us acquire the current farm in Frankenmuth."

– Paul Horny,  
SVREC farm manager





“The dry bean industry has depended on the research conducted at the Bean and Beet Farm for years. The most significant outcome is upright plant structure. That change saved our industry. It wouldn’t have been accomplished without the dedication and commitment of the good folks at the farm and the researchers that they work with.”

– Joe Cramer, Michigan Bean Commission



## Industry involvement

The productivity of dry bean and sugarbeet farming has increased dramatically over the years through investments in research made cooperatively and collectively by MSU and the industry.

### Dry bean research

Dry bean research for the industry is a cooperative effort funded by the growers, the Michigan Bean Commission, the bean and grain elevators and the Michigan Bean Shippers Association. The Production Research Advisory Board (PRAB) was established in the early 1970s to enhance existing MSU research and education programs. The PRAB was formed around the same time the SVREC was established and was a model for the Sugarbeet Advancement program. PRAB planted on-farm dry bean variety trials so farmers could see how they performed in their counties, which have different soils and microclimates. In the 1970s, dry bean yields had stagnated at 12 bags per acre. By 2010, yields consistently exceeded 18 bags per acre, a result of research directed at variety development and improved management. Yield increases have ensured that Michigan’s dry bean industry remains active and vital despite increased market competition. In 2015, Michigan was the leading producer of black beans and led the country in organic bean production.



### Sugarbeet advancement

In the early 1990s, Michigan’s sugar industry was experiencing profitability problems and low productivity levels. At the time, sugarbeet growers were looking for an independent organization to expand and promote the small plot research that was being conducted by the MSU research farm and the two sugar companies, Michigan Sugar Company and Monitor Sugar Company. Crop research is traditionally performed on small plots, generally made up of four rows. Growers wanted to see research on larger plots, which more closely mimicked the real-field experience in the Saginaw Valley.

A cooperative effort between Michigan Sugar Company, Monitor Sugar Company, SVREC and MSU Extension formed the Sugarbeet Advancement Committee. The research center and MSU Extension worked together to hire an educator dedicated to this new research. Steve Poindexter, senior MSU Extension educator, is focused on just one commodity – sugarbeets.

Having one educator dedicated to a single commodity allows for advancements in varieties and research, which eventually translates to increases on growers' farms. The Sugarbeet Advancement Committee is now part of the Research and Education Advisory Council (REACH). All beet research in Michigan falls under REACH.

In the early 2000s, the sugar industry in Michigan faced an uncertain future. The parent company of Michigan Sugar filed for bankruptcy, spurring the company's Michigan growers to work together to form their own cooperative and purchase Michigan Sugar Company. Within two years of its formation, the Michigan Sugar Company cooperative's competitor, Monitor Sugar Company, was put up for sale. The Michigan Sugar Company growers analyzed the options for Michigan's sugar industry, ultimately deciding that a merger between the two companies was in the best interest of all sugarbeet growers in Michigan.



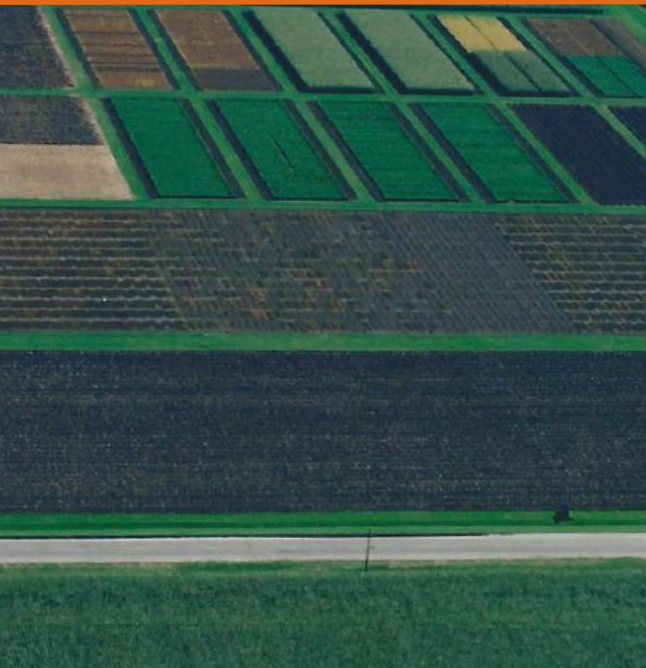
“We wanted to farm using a large plot replicating strip trials of varieties and other related research instead of on the small plots. The farmers at the time were using larger equipment and planters and wanted something they could relate to other than the four-row small plot research. We decided to have someone dedicated to researching these issues to improve on them.”

– Ray VanDriessche,  
Michigan Sugar Company



“A big part of Steve Poindexter’s position is to educate farmers and the public about sugarbeets and the findings of the research on the farm. MSU Extension hired Steve in 1997, and he is funded 50 percent by grower-led associations and 50 percent by MSU Extension.”

– Steve Lovejoy, MSU Extension



## Moving forward

While strong sugarbeet and dry bean research proceeds as planned, growers have long expressed the need for a facility for educational events and other community gatherings. For nearly 10 years, the advisory board worked toward creating the SVREC Agricultural Education Center. The 11,000-square-foot educational facility will be used by MSU Extension educators, industry leaders and the local community.

The SVREC Agricultural Education Center includes a 270-person meeting room, a 50-person classroom for hands-on learning activities, on-site offices and a

Research conducted at and associated with the SVREC and former research farm locations has provided Michigan sugarbeet and dry bean growers with accurate, economically relevant knowledge that has helped keep Michigan a nationwide leader in both dry bean and sugarbeet production. Expansion of the facility allows SVREC to integrate research and education in one convenient location, powering MSU dry bean and sugarbeet research into the future.





multipurpose reception space for events or educational displays. The center will also feature tours that showcase current research.

More than \$1 million was raised by the sugarbeet and dry bean industries and Michigan businesses. Support for the project is generously provided by Michigan Sugar Company, GreenStone Farm Credit Services, Star of the West Milling, Syngenta, Betaseed, American Crystal Hybrids, Crop Protection Services, Cooperative Elevator, Dave Hausbeck Trucking, Bayside Best Beans, Michigan Crop Improvement Association, Thumb National Bank and Comerica Bank.

In early 2009, the Saginaw Valley field station was relocated and renamed to expand research opportunities and improve grower access to research results. MSU President Lou Anna K. Simon (center) attended the ceremonial groundbreaking of the relocated Saginaw Valley Research and Extension Center in Frankenmuth. Also attending were (left to right): Joe Cramer, Star of the West Milling Co. vice president of edible bean marketing; Tom Coon, MSUE director; Charles Bauer, Michigan Sugar Company board member and sugar beet farmer; Steve Pueppke, MAES director; Simon; Jim Byrum, Michigan Agri-Business Association president; Mark Flegenheimer, Michigan Sugar Company CEO; Robert Green, Michigan Bean Commission executive director; Jack Frank, Michigan Bean Commission board member and bean farmer.



Photo courtesy of Communications and Brand Strategy

**“In 2004 the two companies, Michigan Sugar and Monitor Sugar merged to become one grower-led cooperative. This allowed us to concentrate on specific production obstacles, and the research farm was able to make significant contributions to solving those issues.”**

**– Ray VanDriessche,  
Michigan Sugar Company**



“Here we can integrate research and education in one place. It will be great to have one convenient location that is affiliated with the university to have meetings. It will also serve as great teaching grounds for growers and agribusiness professionals.”

– Steve Poindexter, senior MSU Extension educator



## SVREC Advisory Board

The MSU SVREC Advisory Board has played an integral role in the success of the SVREC, guiding the location of the farm and the direction of the research needed for both dry bean and sugarbeet industries. The MSU SVREC and the sugarbeet and dry bean industries value and appreciate the time and effort that the advisory board put in to guiding the SVREC for the betterment of Michigan agriculture. While every effort was made to determine those who assisted in the early years, we were unable to compile a complete list of board members from 1969 to 1980. Efforts were made to capture the names of as many advisory board members as could be found from meeting minutes dating back to the early 1980s, and those members are listed below:

Lyle Ackerman	Don Christenson	Joe Gammons	Ron Helmreich
Wayne Adams	Joe Cramer	Robert Gast	Rob Henne
E. Anderson	Teresa Crook	Ron Gehl	Dan Hensler
Loren Armbruster	Clay Crumbaugh	Rick Gerstenberger	Stephen Herr
Eric Bailey	Fred Davis	Stan Gettel	John Heussner
Neil Barnes	J. Davis	Mark Graham	R. Hickey
Charlie Bauer	Carl DeGuss	Ian Gray	Garnet Hoard
Troy Bauer	Robert Dodge	Bob Green	Steve Hoard
Cliff Beninger	Eric Dubay	C. Grekowski	George Hogaboam
Wallace Bierlein	Tim Ducket	Richard Gremel	Mike Hollingsworth
Bob Boehm	Wes Edington	Jeff Gulick	Paul Horny
William Bortel	Glen Elenbaum	John Guthrie	George Hosefield
Bob Braem	F. Elia	Corey Guza	Jim Howe
Cal Bricker	Boyd Ellis	Gerald Haarer	Lee Hubbell
Phil Brimhall	Robyn Englengrit	Mike Haas	John Huessner
Jerrold Brown	Kendall English	S. Haley	P. Hufford
Matt Brown	Milton Erdman	John Halloin	Loren Humm
M. Brownlee	Earl Erickson	Linda Hanson	Mitch Irwin
Charles Buchholz	Ina Feathers	E. Hardt	Thomas Jennings
Doug Buhler	Dennis Fleischmann	Dale Harpstead	Mike Jewett
John Burk	Ralph Fogg	Jeff Harrington	Dean Jickling
Shawna Bushey	Eunice Foster	Ray Hecht	Brad Johnson
Jim Byrum	M. Frakes	Wayne Hecht	David Johnson
Wayne Carruthers	Jack Frank	Mark Helmreich	Donald Keinath

SVREC Advisory Board members, continued

Gerald Keinath  
 Jim Kells  
 James Kelly  
 Thomas Kennedy  
 Randy Kern  
 Rod King  
 Rick Kitchen  
 Henry Knier  
 John Knoerr  
 John Kohr  
 Dale Kuenzli  
 Carrie Laboski  
 Dick Leach  
 Jim LeCureux  
 Ted Leipprandt  
 Gary Lemme  
 Marshall Lewis  
 Brian Long  
 Steve Lovejoy  
 M. Malburg  
 Frank Marcello  
 Bernie Marchetti  
 Luther Markwart  
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 C. Marsh  
 Sally Martin  
 Keith Martus  
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 Clay Maxwell  
 Dirk Maxwell  
 Pete Maxwell  
 Art McClintic  
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Jim McIntosh  
 Basil McKenzie  
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 Gene Meylan  
 Warner Meylan  
 Phil Miklas  
 P. Morris  
 Neil Mosher  
 E. Mueller  
 Grant Nichol  
 John Niederer  
 K. Norosel  
 Jim Oaks  
 Eldor Paul  
 Dean Peterson  
 Paul Pfenniger  
 Leroy Pickett  
 Fran Pierce  
 Robert Pike  
 Steve Poindexter  
 Maria Posa  
 R. Posthumus  
 Edward Powell  
 Gary Powell  
 David Pratt  
 Steven Pueppke  
 Karen Redman  
 Pierce Reeve  
 Chuck Reid  
 Gary Reif  
 Stuart Reinbold  
 Bill Renn  
 Karen Renner  
 L. Robertson

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 Michael Roggenbuck  
 Roger Roslund  
 Harold Rouget  
 Donald Rueger  
 John Rummel  
 David Rusel  
 F. Russell  
 A. Saettler  
 Fred Saettler  
 Jim Sahr  
 Bob Sandborn  
 Joe Saunders  
 Rob Schaffer  
 Tom Schindler  
 LeRoy Schluckbier  
 C. Schneider  
 Mark Seamon  
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 Alvin Smucker  
 W. Snyder  
 Charles Southworth  
 Christy Sprague  
 Larry Sprague  
 Deanna Stamp  
 B. Starke  
 Jim Stein  
 Jim Stewart  
 Al Stoutenburg  
 J. Sturm  
 D. Sutherland  
 Don Sutto  
 Amy Sweeny  
 Rich Sylvester

Antoni Szafranek  
 John Tagget  
 Jerry Taylor  
 William Thayer  
 Clair Theurer  
 Einer Thorlund  
 George Thorp  
 Mark Uebersax  
 J. Valade  
 Gene VanDriessche  
 Ray VanDriessche  
 Reggie VanDriessche  
 Greg Varner  
 Paul Varner  
 Russ Volker  
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 Tom Wadsworth  
 J.R. Wagner  
 K. Walters  
 N. Wassimi  
 Ann Watters  
 Jerry Wenkel  
 R. White  
 David Wishowski  
 S. Wittwer  
 Doreen Woodard  
 Tom Wright  
 Bruce Wymer  
 Robert Young  
 Richard Zielke  
 Tom Zimmer  
 Mike Zwerk



“SVREC has served an important role in the Michigan Sugar youth project. Youth are able to come to a field day at the farm to learn about research and sugarbeets. They learn everything from weed control to pesticide use. This is a great teaching facility for young people. The expansion will greatly affect this program.”

– Ray VanDriessche,  
 Michigan Sugar Company

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