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
The 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.
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 (REAC). All beet research in Michigan falls under REAC.

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
Moving forward

While strong sugar beet 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 sugar beet and dry bean growers with accurate, economically relevant knowledge that has helped keep Michigan a nationwide leader in both dry bean and sugar beet production. Expansion of the facility allows SVREC to integrate research and education in one convenient location, powering MSU dry bean and sugar beet research into the future.

“A big part of Steve Poindexter’s position is to educate farmers and the public about sugar beets 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
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.

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.

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“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

Photo courtesy of Communications and Brand Strategy
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:

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<th>Name</th>
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<td>Lyle Ackerman</td>
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<td>Wayne Adams</td>
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<td>E. Anderson</td>
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<td>S. Haley</td>
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<td>Linda Hanson</td>
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<td>Charles Buchholz</td>
<td>Ina Feathers</td>
<td>E. Hardt</td>
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<td>Doug Buhler</td>
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<td>M. Frakes</td>
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<td>Wayne Carruthers</td>
<td>Jack Frank</td>
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“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 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
Robert Markwart
C. Marsh
Sally Martin
Keith Martus
Richard Maurer
Clay Maxwell
Dirk Maxwell
Pete Maxwell
Art McClintic
John McGill
Mitch McGrath
Jim McIntosh
Basil McKenzie
B. Meggitt
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 Pfennignier
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
Roger Rockafellow
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
A. Shirazi
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
Clint Wackerle
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