The William H. Miner Agricultural Research Institute



Carrying on William Miner's vision of science and technology in the service of agriculture and the environment.

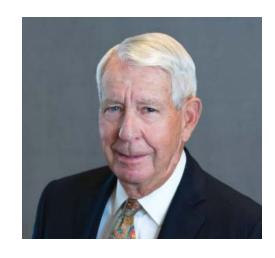
2018-19 Annual Report



MESSAGE FROM THE CHAIR

Dr. Joseph Burke truly embodied the Spirit of Heart's Delight Farm. For more than 30 years he worked to help carry out William Miner's vision for agriculture and the North Country through his involvement with the board of trustees of Miner Institute where he chaired the board for 30 years; as trustee of The Alice T. Miner Museum; and also of the William H. Miner Foundation. He tirelessly researched and wrote the biography of William Miner, which was subsequently transformed into a documentary in 2016. His leadership and dedication helped Miner Institute evolve into the fantastic organization that it is today. Dr. Burke's August 3 death truly marked the end of an era.

I was chosen to succeed Dr. Burke as chair in September. He leaves an organization that the board is truly proud of. Miner Institute has been a longstanding trusted source of information for the agricultural



community, and it continues to serve farmers, agricultural and environmental science students, and the agribusiness industry through its research, educational programs and seminars, events, and newsletters. More emphasis is also being placed on reaching out beyond the agricultural community to inform and educate a public that is increasingly removed from agriculture and the production of food.

The Miner team wholeheartedly believes in the mission of Miner Institute – to use research, education, and demonstration to help improve agricultural profitability and sustainability. The Miner vision is for a vital agricultural community that effectively uses forage crops and technology to optimize animal production and well-being while conserving the natural environment.

Rod Giltz
 Chair, Miner Institute Board of Trustees

The Spirit of Heart's Delight Farm

Do right because it is the right thing to do.
Be courteous: you thereby honor yourself.
Be industrious: otherwise you cannot respect yourself.
Be efficient thus gaining the respect of others.
Try to realize the value of time, your real capital.
Be honest thereby attaining true happiness.
Constantly improve in mental, moral and physical quality.
Be fair-minded: shun prejudice and jealousy.
Be loyal and cooperate cheerfully with others.

PRESIDENT'S MESSAGE

We had another tremendous year at Miner Institute.

I am amazed at what our modest-sized staff of about 60 people is able to accomplish in research, education, and demonstration. In 2018 we had nearly 80 students enrolled in our educational programs – that includes undergraduate, graduate students, and interns. These students participated in our Advanced Dairy Management semester, Applied Environmental Science Program, year-long internships, and Summer Experiences in farming, equine management, and agricultural research. At least half of the cows in the region are touched by a Miner graduate and we take great pride in the leadership role that our network of alumni plays.



In 2018 we garnered approximately \$400,000 in research support through grants, facilities, and equipment. Nearly \$900,000 of research

income flowed through the budget in 2018 – another successful year of high impact research. We used research bunker silos for the first time, brought our nutrient management field research sites to a total of four, and continued to enhance our milk analysis program. While conducting the research, our staff managed to make 85 presentations to various scientific and industry groups and write 64 papers.

In the past year, 3671 people came through our stone gates to attend a program or visit our Heritage Exhibit. In all, 32 events were held at the Institute. Dairy Day, Crop Congress, the Dairy Nutrition Short Course, and Equi-Day focused on our industry friends while other programs engaged the community such as hosting the Strides for James 5k/10k/kids Fun Run. Increasingly we have engaged with the dairy industry and the community at large to educate and advocate for agriculture.

Of course, the full story for any organization lies behind the numbers. But, these few metrics tell us that the Institute is on-track and that our staff does a great job. We have so much planned for 2019 – and if you have questions about the range of Miner Institute programs, please feel free to contact us. If you find yourself in the beautiful Champlain Valley, please stop in and experience for yourself the outstanding facilities, grounds, programs, and staff of Miner Institute.

- Dr. Rick Grant



EDUCATION

In 2018, 76 students participated in our educational programs. This includes five Advanced Dairy Management students; 13 summer experience students: 4 Summer Experience in Farm Management interns, 4 Agricultural Research interns, and 5 Equine Management interns; 47 Applied Environmental Science students; six year-long interns who have finished their undergraduate degrees; and five graduate students.

To learn more about our education programs visit whminer.org/education

Advanced Dairy Management Program

The Advanced Dairy Management program, a 15-credit course is a combination of 5 classes offered at Miner Institute. The course is designed to help meet the changing needs and challenges of the dairy industry. The dairy industry today requires greater technical education and knowledge, is operated on borrowed money for expansion to stay competitive, resulting in market forces that demand educational programs in dairy production to remain relevant to the industry. Training leaders of the future is an important part of what we do in our education programming.



Back Row L-R: Quinn Nelson, Michelle Poulin, Sharon Palmer. Front Row L-R: Katelyn Williams, and Julee Tellkamp.

2018 Flanagan Scholarship

A \$1.3 million donation from the late Stephen Flanagan in 2015 established a scholarship fund to help support Miner Institute's education programs. The scholarship is named after Mr. Flanagan and his parents, Stephen S. Flanagan and Frances B. Flanagan. Alexandra Banks took over as yearlong dairy intern in August. Alexandra joins Wyatt Smith, who is finishing up his Master's degree in dairy nutrition at the University of Vermont, as a Flanagan scholarship recipient. Alexandra earned a Bachelor's degree from the University of Maine in May 2018, then came to Miner as a Summer Experience in Farm Management intern. She says that when she came to Miner, "I was originally thinking I'd like to go to vet school, but after being here and working with cows on a daily basis, I think I want to stay working on a farm, specifically with calves/heifers and potentially become a calf manager or heifer herdsman."

Wyatt will defend his thesis in March and then return to the Midwest where he will serve eastern Minnesota and western Wisconsin as a dairy nutritionist for Vita Plus.



Wyatt Smith

Summer Experience Programs

The summer experience programs offer students a 13-week paid internship focused on either dairy farm management, agricultural research, or equine management. Students from around the country apply for the highly competitive internships.

In 2018, we welcomed 13 students from a multitude of universities. Participating in the Summer Experience in Equine Management were Cassie Magdziarz from West Texas A&M University: Maddie Bennett from the University of Idaho; Catie Ott from Pennsylvania State University; Anna Zhigareva from the University of Edinburgh; and Alyssa Pobocik from SUNY Cobleskill. Participating in the Summer Experience in Agricultural Research were Emily Fread from North Carolina State University; Jazmin Markey from Delaware Valley University; Tori Daniels from the University of Illinois; and Dominique D'Huyvetter from the University of Wisconsin-Madison. Participating in the Summer Experience in Farm Management were Katrina Klobucher from the University of Massachusetts Amherst; Laura Livingston from Michigan State University; Lynn Olthof from Michigan State University; and Alexandra Banks from the University of Maine.



Back row L to R: Cassie Magdziarz, Katrina Klobucher, Laura Livingston, Lynn Olthof, Alexandra Banks, Maddie Bennett, Catie Ott.

Front row L to R: Emily Fread, Anna Zhigareva, Alyssa Pobocik, Jazmin Markey, Tori Daniels, Dominique D'Huyvetter.

- 2018 student testimonials

Applied Environmental Science Program

The Applied Environmental Science Program features courses taught on a full-day basis; the format allows integration of theory developed in lectures with hands-on experience in indoor and outdoor labs dealing with soil, water, forestry, and the agriculture-environment interface.

Courses offered as part of the 2018 program were Forest Ecology and Management with Dr. Mark Lesser; Agriculture and the Environment with Stephen Kramer; Water Quality and Modeling with Patrick Korths; Wetland Ecology and Management with Dr. Mary Alldred; Soil Science with Laura Klaiber, and Wildlife Ecology and Management with Dr. Danielle Garneau, which was offered on campus in 2018.



Back Row L to R: Stephen Kramer, Patrick Korths, Dr. Mark Lesser, Dr. Mary Alldred, Dr. Danielle Garneau, Laura Klaiber, Lloyd Staats III, Michael Hurban, Alexandria Elliott.

Front Row L to R: Dr. Edwin Romanowicz, Dr. Andrew Buckser, Vasu Govani, Devon Rush, Troy Tetreault, Makayla Tompkins, Matthew Adams, Christopher Nicholson, Stephanie Gray, Alex Epifanio, Helena Mueller, Angela Sadrislamova.

[&]quot;I know this experience changed my life for the better and it will help me in every aspect of my future!"

[&]quot;I loved my experience at Miner and am so glad I stumbled upon the program! I've already promoted it to our animal science department and have even been asked to give some presentations on the internship."

RESEARCH

William Miner's vision for Heart's Delight Farm in 1928 was to provide "opportunities ...for experimental and research work in order that it may serve to advance the science of agriculture." Today, Miner Institute proudly carries on his noble mission. Our highly-regarded professional staff, exceptional technical staff and well-managed dairy herd and crop program combine to support a unique research model focusing on the interface of crops, animals and nutrient management. Results for most of the research conducted by Miner Institute are reported to the public through scientific meetings and journals or through the monthly Farm Report available on our website at whminer.org.

A year-long study was completed in 2018 that evaluated the effect of management practices on the natural calving behavior of dairy cows. The USDA AFRI Animal Well-Being Program Area awarded funding for this project as collaboration among The Ohio State University, University of Tennessee and Miner Institute. Results from this project will create foundational knowledge about the natural calving behavior of dairy cows, as well as practical and novel housing recommendations for dairy producers to improve the welfare of their animals at calving.





Continued support from the Northern New York Agricultural Development Program (NNYADP) provided the opportunity to evaluate the impact of heat stress on dairy cattle well-being on farms with differing heat abatement systems in Northern New York.



Research continues to expand the use of mid-infrared technology to analyze milk and develop models which would enable producers to detect health problems in individual cows or monitor nutrition and management practices on a whole herd basis. In 2018, support from the American Jersey Cattle Association has enabled Dr. Dave Barbano, a dairy food scientist at Cornell University and Dr. Heather Dann of Miner Institute, to develop milk fatty acid parameters for feeding and herd management on Jersey farms.

Miner Institute has evolved into a leader in dairy cattle nutrition when it comes to forage quality, fiber digestibility and animal performance.

In 2018, a study was conducted that evaluated animal performance when fed corn hybrids with differing digestibility profiles. This information is valuable for dairy producers to maximize the feed quality of forages grown on the farm and reduce the amount of purchased feeds.





Above: Bunk storage for ~100 tons of corn silage used for research feeding trials

Left: Tiestall facility used to feed cows individually for research trials.

Environmental concerns about the impact of nutrient loss of phosphorus and nitrogen from tile-drained fields in the Lake Champlain watershed have been a focus of several research projects conducted at Miner Institute over the last few years. Through funding support from NRCS and NNYADP, fields have been equipped with autosamplers and instrumentation that measures waterflow from surface and sub-surface (tile) runoff which provides a comprehensive understanding of pathways for nutrient loss needed to establish best management practices for farmers to retain these valuable nutrients on their fields.

Additional studies are underway to evaluate the use of cover crops to mitigate the loss of nutrients from fields in corn silage production and transport of fecal coliform and E. coli bacteria in surface and subsurface runoff from tile-drained fields. Regulatory agencies and legislative bodies are using this information to better understand the complicated dynamics of nutrient flow in fields as they create laws and rules that regulate agricultural practices to improve water quality.



Surface runoff from snowmelt is measured at one of our edge-of-field monitoring sites.



Evacuating rumen contents is a great teambuilding event.





Sampling the contents of the rumen.

The ruminally cannulated cows at Miner Institute are an important part of our research team. They are used for studies focused on forage digestibility and rumen health. A study conducted in 2018 measured the total contents of the rumen for each cow fed diets with different fiber digestibility. It took many hands and the cows were able to get back to their normal routine in less than an hour.



- photo by Christopher Crosby Morris

In 2018, we continued our collaborations with Michigan State University investigating pre-clinical indicators of Equine Metabolic Syndrome (EMS). Collecting samples from 4 newborn foals at birth for this long-term study will help define just when the markers for EMS begin to appear. Gaining knowledge and insight into EMS will enable the feeding and management of horses for improved health.

DAIRY

The Miner herd finished out 2018 with a really nice report card. When comparing our dairy herd with herds the same size we are in the top 99% for average herd milk production, pounds of butterfat, and pounds of protein. We have reached as high as 7.5 pounds of fat and protein daily.

The average milk price for the year was a little above \$17.30 per hundredweight, which was down again from 2017. By paying attention to details we have been able to capture the maximum quality bonuses; somatic cell has stayed below 100,000 for most of the past year. We also locked in our purchased grain giving us some control of income over feed cost.

Last summer was another challenging year for growing crops. While 2017 dished out heavy rains, 2018 was very dry, yields were down, the grass fields went dormant, and despite equipment failures we were able to harvest enough feed to fill the bunkers silos. Alfalfa fields tested higher in crude protein because of lack of rain and the stems had lower lignin. We grew both BMR and conventional corn along with some different varieties for research feeding trials. We also grew a few acres of cover crop.

Performance measure	March, 2019
Daily milk, lb/d	101
150-day milk, lb/d	104
Days in milk	167
Test-day fat, %	4.2
Test-day true protein, %	3.0
Rolling herd average milk, lb/cow/yr	31,091
Age at 1st calving, months	23
Total cows in herd	448



Farm Summer Experience Students Show Day at Clinton County Fair L to R: Lynn Olthof, Laura Livingston, Alexandra Banks, and Katrina Klobucher.

Multiple research projects requiring feed and dietary changes and pen moves were conducted again this year. Fulfilling our mission of education, research, and demonstration is a challenge that certainly sets us apart from average dairy farms. We rely on a knowledgeable and flexible dairy and crops staff to meet our goals and maintain our successful dairy program.

Four summer intern students were guided by our staff learning how to milk cows, feed calves, and maintain a healthy herd. The field crops staff worked with the students teaching them about growing and harvesting crops – everything from picking rocks, preparing the ground, to mowing, merging, and chopping hay crop silage. Many of these students had never driven a tractor before, so they gained practical, hands-on experience in how a modern production dairy farm operates. Most of these interns will go to work in the dairy industry in some capacity. Students train an animal to show at our local county fair, which is usually the highlight of the summer for them. We also went on several farm tours to expose them to different ways of farming. We asked one of the summer students, Alexandra Banks, to stay on as the year-long intern for 2018-2019. Last year's intern, Victoria Vendetta, will be going off to Veterinary School in the fall of 2019.

Overall, these outstanding herd performance numbers and all of our dairy activities are made possible because of our dedicated farm staff!

"The credit belongs to the man who is actually in the arena, whose face in marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming . . . and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat."

- Teddy Roosevelt.

EQUINE

Striving for excellence is the path we pursue in all aspects of the equine program at Miner; the reward comes in achieving our goals and finding balance in the highs and lows each year has to offer. Through it all, it is the students and community that learn from the continued changes and growth found in the Heart's Delight herd and the historic barn they occupy. Ernest Hemingway is credited with saying, "It is good to have an end to journey toward, but it is the journey that matters in the end." The journey that was 2018 was a poignant reminder to honor the end of an era, but to treasure the lessons learned and connections made during that journey.

Four new foals were welcomed to the herd; a filly HD Villenova (DPR Noble Viking x Spring's National Velvet) and three colts, HD Hamilton (Canon x Sugarlane Dominique), HD Providence (Privilege x UVM Kimberly) and HD Burke (Canon x UVM Loyalty). All are excellent representations of the Morgan breed, but as we name our horses after places in New York, we have long been holding the name Burke in reserve for a very special colt. Burke is a lovely village near Malone, NY which we visit bi-annually to bring Morgans to the historic home of Almanzo Wilder, a Morgan breeder himself. When the first foal arrived in May, we knew right away that this handsome, inquisitive and stately colt was worthy of sharing a name with the Chairman of the Board of Trustees, Dr. Joseph C. Burke. How bittersweet that name has become since the passing of Dr. Burke, but the promise embodied in this young horse continues the journey.

The journey was an important part of the sales of four young Morgans as well. HD Lily Dale (Equinox Challenge x UVM Valkyrie) had her training started by students and interns giving her a rock-solid foundation to launch her competitive carriage driving career with her new owner. Generally, prospective buyers are seeking to purchase a horse with a set of riding or driving skills under their belt; 2018 brought three buyers to Miner seeking young prospects that they would enjoy bringing along in their training themselves. HD Times Square (Townshend Rob the Wave x HD Valhalla), HD Rochester (Canon x Sugarlane Dominique) and HD Liberty (Canon x HD Massena) all were chosen based upon their good temperaments, a healthy start in life, and for the "clean slates" they were as two year olds to fulfill their new owners' goals.



HD Philadelphia (UVM Equity x UVM Valkyrie)



HD Burke "Joey" (Canon x UVM Loyalty)

Major milestones for HD-bred horses included a win for HD Philadelphia (UVM Equity x UVM Valkyrie) with whip, Karen Lassell, at their first Combined Driving Event as a team. Dr. Josephine Trott purchased HD Redford as a 4-year old gelding and brought him up through the levels of dressage on her own. She was rewarded for her efforts receiving a Gold Medallion from the American Morgan Horse Association in Open Competition in Grand Prix Dressage, the Olympic level of that equestrian sport. Equine Intern, Lindsey Bjorgan guided our resident Western Pleasure World Champion stallion, Privilege, to many blue ribbons and the Reserve Championship in Western Basic Dressage at the New York Morgan Horse Show in September.

We know that students and visitors to Miner are better for having spent time with the Heart's Delight herd, but we were touched by the outpouring of memories and support received when we announced the passing of HD St. Regis (UVM Elite x Blue Rose Martha). A handsome bay horse born in 1990, Reggie had a successful career as a Western Pleasure horse and brought many a rider joy earning a show ribbon or simply from getting that winning feeling loping around the arena. "Professor Reggie" specialized in equine management, training techniques, and hard to define life lessons, both at Miner and UVM in Burlington, VT for countless semesters. On August 15, 2018, Reggie was laid to rest at the age of 28; a teacher to the end.

2018 YEAR IN REVIEW

In 2018, we hosted 32 educational, research, and community events that attracted more than 3,600 visitors to Miner Institute. Miner Institute staff gave 85 presentations in three countries on dairy, equine, crop, and nutrient management topics. Our staff wrote 64 papers for the dairy industry. Five papers were peer-reviewed and 19 research abstracts were printed in high-impact journals.

Here are some of the highlights from 2018:

JANUARY

- Hosted a tour with 20 students from New England agricultural colleges.
- Hosted a Disaster Preparedness workshop recognizing 20 years since the Ice Storm of 1998.
- Our annual Crop Congress event attracted about 100 attendees.

FEBRUARY

- Hosted a tour of about 40 dairy producers from Quebec.
- Hosted a Comedy for a Cause event with Completely Stranded and raised \$900 for the United Way of the Adirondack Region.

MARCH

- Hosted a Cornell Cooperative Extension pasture school with about 25 attendees.
- Our annual EquiDay event attracted around 65 attendees.

APRIL

- Hosted a Horse Speak Clinic with Sharon Wilsie.
- Hosted Clinton Community College students for an environmental chemistry workshop.
- Participated in judging and interacting with students, advisors, and parents at the Champlain Valley Regional Science Fair.

MAY

 Hosted the Sixth Annual Strides for James charitable 5K/10K race. More than 200 runners participated.

JUNE

- Participated in the annual Museum Days event with around 100 visitors to the Heritage Exhibit over the course of the weekend.
- · Hosted a Myler Bit Clinic with Adirondack Tack.
- Hosted a workshop on preserving photographic collections with about 40 attendees.
- Hosted nearly 500 fifth grade students and teachers as part of our annual Farm Days for Fifth Graders event.
- Presented research at the American Dairy Science Association annual meeting in Knoxville, TN.
- Participated in Education Day at the Plattsburgh Farmers and Crafters Market.

JULY

- Participated in the Clinton County Fair in the horse and dairy cattle shows.
- Collaborated with The Alice T. Miner Museum to host a Cenntennial Summer Fair event celebrating 100 years since the end of World War I. We had around 200 attendees, some in period attire.

AUGUST

- Hosted a blood drive for North Country Regional Blood Center.
- Represented Miner Institute and the Adirondack Coast at Adirondack Day at Saratoga Race Course.
- Hosted a tour of about 25 people from Boehringer Ingelheim.

SEPTEMBER

 Co-Hosted with Mountain Lake PBS a screening of the trailer of the Ken Burns documentary, The Mayo Clinic: Faith, Hope, Science. After the screening a panel discussion followed comparing the founding of the Mayo Clinic to that of Physicians Hospital by William Miner.

OCTOBER

- Hosted students from Chazy Central Rural School kindergarten, first grade, and fifth grade classes as part of Miner Day celebrations.
- Hosted a tour of around 50 animal science students from Beekmantown High School.
- Collaborated with Cornell Cooperative Extension, Autism Alliance of Northeastern NY, Beekmantown Central School, and Clinton, Essex, Franklin Library System to bring Dr. Temple Grandin to the North Country for several talks and a meet and greet with farmers and animal science students.

NOVEMBER

 Hosted a meeting for dairy farmers put on by Oxbo International with about 45 attendees.

DECEMBER

- Our annual Dairy Day meeting attracted 120 attendees.
- Hosted the Cornell Feed Dealers meeting with about 35 attendees.

Dr. Joseph C. Burke: A Remembrance

It is difficult to find appropriate words that adequately express just what Dr. Joseph Burke meant to Miner Institute and the countless staff and students he touched during his more than 30 years as chair of the board of trustees. He was a very involved and engaged chair, who truly enjoyed walking around the Miner Institute grounds interacting with the staff, students, and visitors who he encountered.

Dr. Burke was a driving force in the creation of the Heart's Delight Farm Heritage Exhibit in 2003 which pays tribute to William and Alice Miner and the development of Heart's Delight Farm. Each year, the exhibit attracts nearly 2000 visitors and is such an integral part of Miner Institute today; it really is hard to imagine Miner Institute without the exhibit.

Dr. Burke tirelessly researched and wrote the biography, *William H. Miner: The Man and the Myth* that separates the truth from the myriad of myths that have circulated in the 80-plus years since William Miner's death.

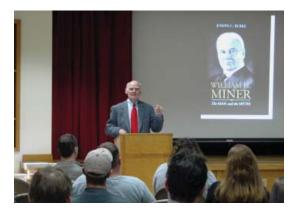
Miner Institute formally dedicated its main education building as the Joseph C. Burke Education and Research Center in October 2012. At the time, Dr. Burke said, "My name on this building really stands for all who have labored for over half a century to make William Miner's dream a reality... The Institute has achieved William Miner's dream that I tried to describe in my biography, William H. Miner: The Man and the Myth, of linking education, research, and demonstration and seeing productive agriculture and protected environment as a challenge not a choice."

Dr. Burke would undoubtedly count strategic planning as his proudest accomplishment for Miner Institute. He recognized how important it was for any organization to measure and achieve its goals. "He was so passionate about understanding and ensuring that William Miner's vision for the Institute endured. He constantly pushed us to consider our mission – research, education, and demonstration – and how we could achieve the next milestone," Dr. Rick Grant remembered.

Dr. Burke's leadership and insight will be dearly missed but never forgotten.



Dr. Joseph C. Burke Chair, Board of Trustees 1988 - 2018





COMMUNITY CONTRIBUTIONS

Comedy for a Cause

In February, we attracted around 140 people to laugh along with us and Plattsburgh comedy group, Completely Stranded, and helped us to raise \$900 for the United Way of the Adirondack Region. This was the second year we hosted a Comedy for a Cause event and it was so much fun. Completely Stranded will return for a fundraising show for the United Way of the Adirondack Region on March 8, 2019.



In May, the Institute once again hosted the *Strides for James* charity run, a 5K/10K/fun run that raises funds for the James Wilson Memorial Scholarship at Clinton Community College. The scholarship provides an opportunity to channel James' giving spirit and help others. James Wilson was an avid outdoorsman with a kind heart who was killed in a motorcycle accident in 2012. More than 200 runners and about 300 total people attended this event at the Institute. We will host the 7th Annual Strides for James May 11, 2019.



In September, Miner Institute suited up for the third annual ETS Corporate Kickball Challenge. Our team, *The Miner Threat*, was one of 18 teams that participated in the tournament which raised \$1900 -- half the funds went to the United Way of the Adirondack Region and the other half went to the winning team's charity of choice. WB Mason's team won the tournament and directed \$950 to the FitzPatrick Cancer Center. The Miner Threat is already gearing up for 2019's challenge!

Bikes for foster children

In December, our staff put together four bicycles that were donated to foster children in Clinton County. It was a great experience for our staff for a great cause. We worked with the United Way of the Adirondack Region to help us place the toys with families in need in time for Christmas. United Way partnered with Clinton County Department of Social Services to identify foster families to donate the toys to.









OUTREACH

In 2018, nearly 3,700 people attended an event at Miner Institute or visited the Heritage Exhibit.

We sent out 9 press releases which resulted in 8 news stories, one WIRY radio interview; four articles in the Morning Ag Clips; and one standalone photo with cutline in the *Press Republican*. Additionally, an event we co-hosted with the Alice T. Miner Museum was the subject of an interview with Calvin Castine for Hometown Cable. An event we co-sponsored that brought Dr. Temple Grandin to the region for an agriculture talk prompted an interview with travel radio host Stephanie Abrams.

We co-hosted a screening of the Ken Burns documentary *The Mayo Clinic: Faith, Hope, Science* with Mountain Lake PBS that also featured a panel discussion comparing and contrasting the founding of The Mayo Clinic with that of Physicians Hospital.

We helped to represent agriculture on the Adirondack Coast at the annual Farm Bureau Taste NY event in Albany and participted in a Visit the Adirondacks day at the Saratoga Race Course in August. We also participated in several career fairs for local high school students.





Moderator Thom Hallock (left) with panelists from L to R: Dr. Claude Deschamps, President/CEO of UVMHN Medical Group and former Mayo Clinic Chief of Surgery; Ellen Adams, Ph.D., Director/Curator of The Alice T. Miner Museum; and Dr. Richard Frost, author and historian.

"Very interesting. Nice combination of Mayo and Miner histories."

surveyed participant response to Rural Healthcare event



Dr. Grandin poses with animal science students from Vermont Technical College and the University of Vermont (top) and chats with some of Miner Institute's staff while touring the Institute (right).

Dr. Temple Grandin is a world-renowned autism advocate, best-selling author, animal welfare and behavior expert, and a professor of Animal Science at Colorado State University. She is well known for relating her personal experience as someone with autism to provide an interesting perspective on how thinking differently can provide opportunities. The Autism Alliance of Northeastern NY brought Dr. Grandin to the North Country in October and

Miner Institute partnered with Sara Bull at Cornell Cooperative Extension of Clinton County; Anja Bouchard of the Clinton-Essex-Franklin Library System; and Veronique Krohn, Agricultural Education Teacher at Beekmantown High School to organize an agriculture talk for the public at Beekmantown High School.

COLLABORATION

- Adirondack Farms Peru, NY
- Ashley Audet Cargill
- Dr. Ellen Adams The Alice T. Miner Museum
- Greg Albrecht NYS Soil & Water Conservation Committee
- Dr. Mary Alldred SUNY Plattsburgh
- Eileen B. Allen, GISP SUNY Plattsburgh
- Marie Audet Blue Spruce Farms
- Dr. Dave Barbano Cornell University
- Tom Barber Crop Production Services
- Dr. Gary Bergstrom Cornell University
- Eric Bever Champlain Valley Agronomics
- Linda Boccuzzo
 VT Agency of Agriculture,
 Food & Markets
- Anja Bouchard Clinton, Essex, Franklin Library System
- Mary Breyette
 Cornell Cooperative
 Extension, Clinton County
- Sara Bull Cornell Cooperative Extension, Clinton County
- Dave Bush Page Seeds
- Charlotte Cannon Fox Point Farm
- Dr. Larry Chase Cornell University
- Clinton County Historical Association Plattsburgh, NY
- Mike Contessa Champlain Valley Agronomics
- Linda Corey
 Corey Equine Dental
- Country Dreams Farm Plattsburgh, NY
- Chuck Custeau
 Yankee Farm Credit
- Karl Czymmek Cornell Pro Dairy
- Dance Plattsburgh Plattsburgh, NY
- Dr. Mike Davis Cornell University
- University of Vermont Morgan Horse Farm

- Brett Denny Vermont DHIA
- Dimock Farms LLC Peru, NY
- Kelly Donoghue Clinton County Emergency Management Services
- Dr. Pascal Drouin Lallemand
- Dr. Jen Dulin Vermont Large Animal Clinic
- Mark Eddy Seedway
- Jerry Emerich Select Sire Power
- Dr. Joshua Faulkner University of Vermont
- Anita Figueras
 Cornell Cooperative
 Extension, St. Lawrence
 County
- Dr. Andrea Formigoni University of Bologna
- Claude Fortin Mycogen Seeds
- Dr. Dave Franzi SUNY Plattsburgh
- Paul Frederick
 Paul Frederick Productions
- Tiffany Garcia Northern Insuring Agency
- Sharron Garden
 Community Member of the
 Miner Institute Animal Care
 and Use Committee
- Dr. Danielle Garneau SUNY Plattsburgh
- Dale Gates
 USDA-NRCS
- Larry Geohring Cornell University
- Dr. Francis Glenn Glenn Seeds
- John Gloss Dairy One
- Art Graves
 Mycogen Seeds
- Dr. Stefan Grimberg Clarkson University
- Hidden View Farm Champlain, NY
- Mike Hunter Cornell Cooperative Extension, Jefferson & Lewis counties
- Hutchins Family Farm Malone, NY
- Kyohei Ishida Zen-Noh

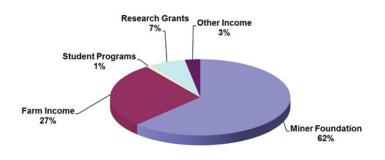
- Jane Jackson Bookends Farm
- Dr. Dan Jaynes USDA-ARS
- Brian Jerose
 WASTE NOT Resource
 Solutions
- Doug Johnstone
 VT Agency of Agriculture
- Ivor Jones
 Select Sire Power
- Patricia Kanzler Innisfree Kennels
- Jason Karszes Cornell Pro-Dairy
- Dr. Quirine M. Ketterings Cornell University
- Key R-D Trailer Sales Plattsburgh, NY
- Tom Kilcer
 Advanced Ag Systems
- Patrick Korths
 SUNY Plattsburgh
- Dr. Peter Krawczel University of Tennessee Knoxville
- Veronique Krohn Beekmantown Central School
- Joe Lawrence Cornell Cooperative Extension, Lewis County
- Dr. Sam Leadley Attica Veterinary Associates
- Dr. Mark Lesser SUNY Plattsburgh
- Joanna Lidback
 Yankee Farm Credit
- Dr. Cathy Lombardi The Oaks Veterinary Clinic
- Steve Mahoney River Bend Ag & Environmental Services
- Dr. Molly McCue University of Minnesota
- Dr. David Mertens
 Mertens Innovation
- Joe Monroe Nutrena/ Progressive Feeds
- Dr. Kimberly Morrill Cornell Cooperative Extension Regional Dairy Specialist
- Dr. Andrew Novakovic Cornell University
- Akihiro Obata Zen-Noh
- Kelsey O'Shea Cornell Cooperative Extension North Country Regional Ag Team

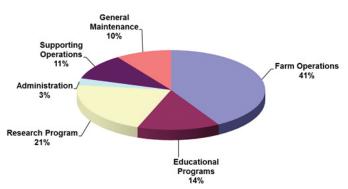
- Dr. Tom Overton Cornell University
- Dr. George Palmer
 Palmer Veterinary Clinic
 Veterinary member of Miner
 Institute's Animal Care & Use
 Committee
- Parker Family Maple Farm West Chazy, NY
- Dr. Katy Proudfoot The Ohio State University
- Dr. Shane Rogers Clarkson University
- Dr. Ed Romanowicz SUNY Plattsburgh
- Jon Rooney
 Monument Dairy
- Dr. Don Ross University of Vermont
- Rusty Creek Farm LLC Chazy, NY
- Dr. Nichol Schultz University of Minnesota
- Dr. Jessica Scillieri Smith NYS Department of Agriculture and Markets
- Dr. Charlie Sniffen Fencrest, LLC
- Carol Tetreault Adirondack Tack
- Ev Thomas
 Oak Point Agronomics
- Rachel Tomko Seedway
- Dr. Mike van Amburgh Cornell University
- Dr. Harold Van Es Cornell University
- Dr. Philip van Harreveld VT Large Animal Clinic, Equine Hospital
- Erik Whittaker Poulin Grain
- Sharon Wilsie
 Wilsie Way Horsemanship

FINANCIAL SUMMARY

The William H. Miner Agricultural Research Institute 2018 Revenue

The William H. Miner Agricultural Research Institute 2018 Expenditures





Remembering Jake Ashline

Jacob Ashline spent nearly 20 years working at Miner Institute. He began his tenure in the dairy barn in 1998, and became the Field Crop Supervisor in 1999 and remained in that role until his retirement in 2016.

Jake passed away on September 16, 2018. He was 65.





Jacob A. Ashline 1953 - 2018

CONGRATULATIONS TO ...

Ashley Cate



Ashley came to Miner in April 2017 after graduating from the University of New Hampshire with an undergraduate degree in Zoology. Ashley was a yearlong research intern until August 2018. She spent a few months in Washington, DC as an intern for the Animal Agriculture Alliance and is now working as a research assistant at the University of British Columbia Dairy Education and Research Center.

Victoria Vendetta



Victoria participated in the Advanced Dairy Management program in 2016 and after earning her animal science degree from the University of Connecticut, she returned to Miner as the year-long dairy intern. Her year-long internship wrapped up in September, but she stayed at Miner as an assistant herdsperson helping to maintain the health of our dairy ehrd. She hopes to start vet school in fall 2019.

Lindsey Bjorgan



Lindsey was a yearlong equine intern at Miner from September 2017 to September 2018. She was a Summer Experience in Equine Management intern in 2016 and graduated from North Dakota State University with a Bachelors degree in Equine Science and a minor in Animal Science and Agribusiness. Lindsey works as an event server and concierge at The Kentucky Castle in Lexington, KY.

Katie McMahon



Katie spent 10 months at Miner as a research intern. She has an animal science degree from the University of Illinois at Urbana-Champaign. Currently, Katie is working as a file clerk at a large law firm in Chicago and hopes to attend law school beginning in fall 2020 to pursue a career in agricultural law.

HEART'S DELIGHT FARM HERITAGE EXHIBIT



HEART'S DELIGHT
HERE IN 1903 WILLIAM H. MINER
DEVELOPED A 15,000 ACRE FARM
EMPLOYING OVER 800 WORKERS AND
UTILIZING THE LATEST ADVANCES
IN SCIENCE AND TECHNOLOGY

We had another successful Heart's Delight Farm Heritage Exhibit season in 2018.

Events such as Strides for James in May, Farm Days for Fifth Graders in June, and our collaborative event with The Alice T.

Miner Museum commemorating 100 years since the end of World War I each brought hundreds of visitors to the exhibit.

Additionally, we participated in Museum Days in June with numerous other participating museums in Clinton County; we did a tour with students from Champlain Valley Educational Services; and students from Jefferson County who hope to pursue careers in the dairy industry.



Centennial Summer Fair





Miner Institute and The Alice T. Miner Museum teamed up for a July 14 history-themed event that attracted 200 visitors and raised \$400 for The United Way of the Adirondack Region.

The Heart's Delight Farm Heritage Exhibit is open to the public weekdays from May through October. The gardens and Wayside Walk are open year-round. We welcome the public, groups, schools and clubs to visit us to learn more about William and Alice Miner and their contributions to the North Country.

BOARD OF TRUSTEES & OFFICERS

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Tony LaPierre Owner, Rusty Creek Farm

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North Country Chamber of Commerce

Matthew Bull
Nutrition Consultant
Holtz Nelson Dairy Consultants

Mark McCullough Environmental, Health, and Safety Engineer



Front Row (L-R): Roderic Giltz, Dr. Frederick Woodward, Rocklyn Giroux, Geoffrey Yates, and Richard Eakins.

Back Row (L-R): Dr. Rick Grant, Kirk Beattie, Janet Duprey, Tony LaPierre, and Bernard Leerkes

Absent: Dr. Ann Willey and Steven Frederick

EMPLOYEES & YEARS OF SERVICE

FACULTY/RESEARCH		PHYSICAL PLANT		EQUINE	
Katie Ballard, M.S.	31	Jared Ashline	11	Karen Bonhomme	1
Amy Bedard, M.L.S.	12	Brian Bechard	37	Karen Lassell	23
Amber Bornt	1	Daniel Belrose	16		
Maggie Carter	22	David Boulerice	30	FOOD SERVICE /	
Heather Dann, Ph.D.	14	Steve Fessette	37	HOUSEKEEPING	
Jeff Darrah	16	Mark Gonyo	18		10
Wanda Emerich, M.Ext.Ed.	31	Adam LaCount	9	Tammy Allen	10
Heather Gauthier	18			Hope LaForest	20
Jered Green	2	AGRICULTURE		Michelle Wright	6
Stephanie Green	<1		12		
Charlie Hacker	2	Shawn Bechard	13	GRADUATE STUDEN	TS
Mark Haney	<1	Shaun Castine	9	Casey Corrigan	
Laura Klaiber, M.S.	10	Bethann Buskey	15	Katherine Smith	
Lisa Klaiber	10	Steve Couture	13	Wyatt Smith	
Stephen Kramer, M.S.	24	Frank Decoteau	1 2	Leanna Thalmann	
Michael Miller, M.S.	1	Carl Duprey	<1		
Sarah Morrison, Ph.D.	<1	Scott Guerin	11	INTERNS	
Sheila Mousseau	6	Kristup Kalvaitis Leonard King	<1	Alexandra Banks, Dairy	
Alexander Pape, M.S.	1	Ralph LaBombard	14	Charlotte Cilio, Equine	
		•	14	Cari Reynolds, Research	
ADMINISTRATION		Bryant Meseck	34	Carrice yriolds, Research	
Kirk Beattie	10	Henry Meseck	10		
	18	Anna Pape			
Rachel Dutil	9 15	Troy Rivers Eric Rowe	<1 1		
Rick Grant, Ph.D.	15 25		 -1		
Laurie Miller	35	Dave Sweeney	<1		













The William H. Miner Agricultural Research Institute



1034 Miner Farm Road P. O. Box 90 Chazy, NY 12921 518-846-7121 www.whminer.org

