FROM THE LONG UP

SUMMER 2021





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Meet Our LEADERSHIP

Michael Birger, President and CEO

eading Midwestern BioAg is President and CEO, Michael Birger. Since joining the team last fall, he has made effective personnel changes, established partnerships with innovative companies like Grower's Edge and Sound Agriculture, and guided MBA through a global pandemic. Birger recently earned a "Leadership in Sustainability" award from the Global Summit on All-Things Food.

"Our commitment to the success of our growers is stronger than ever. With the backing of our new owners and the dedication of our employees, we are prepared and poised for growth."

"I am humbled and excited to lead our team of experienced leaders and their partners in Wisconsin, Michigan, Ohio, Illinois, Iowa and Minnesota. Together we will continue to change farming practices with our proven biological approach, which will preserve soil health for generations to come," said Birger.

"We are committed to building on the 30-year history of the company to enhance sustainable success of our customers and the well-being of our employees," said Birger.

Prior to his appointment at MBA, Birger worked as the Vice President of Strategy and Corporate Development for Compass (NYSE: CMP), where he drove strategic growth and increased value through sourcing and structuring corporate investments in agriculture both domestically and internationally. Birger brings over 20 years of experience involving mergers, acquisitions, divestitures and management of operating businesses and joint ventures. Business culture and staff engagement are at the core of his successful business leadership for driving strategic growth with meaningful outcomes.



ABOUT MICHAEL

Michael Birger was born in Odessa, Russia. He holds a Master of Business Administration in Finance from Boston University and two bachelor's degrees from the University of Kansas. In addition to English, Michael can also speak Russian, Mandarin, Portuguese and French. He enjoys skiing, golfing and kayaking.



BIO-CAL® on Galusha Farm

teve Berning, owner of Galusha Farms in Warrenville, Illinois, has been a loyal customer to Midwestern BioAg for over 15 years. Berning cites flexibility, attention to detail, and timeliness as some of the reasons he chooses to work with MBA. "It is custom-tailored to what we need," said Berning.

Berning has grown hay all his life. The oldest of seven children, he grew up on a dairy farm in the hills of Galena in northwest Illinois, milking cows, raising hogs, and growing hay. Now, on his thousand-acre farm, Berning grows mostly hay. In addition to alfalfa, mixed hay, and grass hay, he grows corn and beans. "I've been a farmer my entire life," said Berning. "My goal is to be the most efficient, low-cost, dry hay producer in Northern Illinois"

To reach his yield goal of 5-7 tons per acre per year, Berning uses Bio-Cal for hay. "I really like Bio-Cal," said Berning, "It's a great product to get calcium into the soil to get quick, soft hay."

Steve Lundeen, Berning's sales consultant, talks with Berning on the phone 3-4 times a day. "Steve gives me a lot of helpful agronomic advice, said Berning, "He is always thinking, always doing, and not pushing. Always open-minded."

Another thing Berning referred to about MBA is how fast they work. Berning recalled a story about a friend of his, a sizable hay farmer in his area. He suggested they connect with Midwestern BioAg and the next day they were introduced. Two days later, MBA delivered fertilizer to his field.

"MBA works quick and always has the ability to answer hard questions," said Berning.

Farming is special and Midwestern BioAg appreciates people like Steve Berning who understand its value. "Making something is pretty cool," said Berning, "turning the tractor around and seeing what you've made is special."

X Marks the Spot with BIO-CAL®

Noticing a yellowing area of an alfalfa field, Midwestern BioAg Sales Consultant, Karl Harpstead, CCA, applied Bio-Cal® in an X pattern in hopes of showing the difference Bio-Cal can make. He used flags to note the ends of the X pattern.

Bio-Cal did not disappoint. When returning to the field this spring, the X pattern was clearly defined.

About Bio-Cal

Manufactured exclusively by Midwestern BioAg, Bio-Cal is a blend of multiple calcium sources that are available both upon application and later in the growing season. As a liming material, it contains 32 percent calcium and can be applied to all major crops to supplement the traditional NPK programs seen on most farms.

Bio-Cal can be applied in the spring or fall, or following cutting. Other benefits include improved forage quality, better soil structure and health, and increased winter hardiness.





FROM THE DESK OF GARY ZIMMER

Regenerative Agriculture: When do you start and how?

Dear farmers and agriculturalists,

It appears we live in a world with a lot of dissatisfied people. How do we determine what is right and what is wrong? The fun in farming, and in life, is to contribute. Contribute to the goal of healthy, mineralized soil by using the best knowledge, common sense, and observed practices to be stewards of the land and grow feed and food that is nutritional, clean and soil-building - that is the most fun and profitable way to farm.

All these years, MBA has called it "biological farming." Farming that is focused on soil biology and respectful to the biological system. We want lots of earthworms and high-quality minerals. To get those, we need to feed them and care for the air and water. The new language of today is "regenerative." I have always liked the term. Although, if everything were going great, why would we need to regenerate it?

Every soil and every farm has limiting factors that need regeneration. Start with a complete soil test – it is the best tool available to find limiting factors and devise an improvement plan. Yes, you still must deal with tillage. For all the talk of no-till, there are lots of brown fields as you drive through the country. Shallow incorporating residues, vertical tillage, strip tillage, deep ripping, and high-speed disc are all options for soil management on a physical level.

Then there is the biology. You must create an ideal home and keep the plant and soil biology well nourished. There is a need for calcium. There is no better way to feed them than with Bio-Cal or OrganiCal. The success of these products are proven by the many years of use and positive responses. Many hay fields this year are still in need, if you haven't done so already. Then, there is the rest of the mineral program that your MBA consultant can help you with. Summertime is also not a bad time to pull a tissue test as an additional tool to monitor fertility.

So, the fun and profit in farming is figuring this out for your farm. You can find article after article on biologicals, bio-stimulants, cover crops, carbon sequestration, etc., which will be a big part of your farm income in the future. Why not start now? Crop income this year will be favorable so you can invest in taking your farm to the next level.

Midwestern BioAg has the best trained, most experienced consultants that will ever visit your farm. We have the products. So, when do you get started and how? Contact your MBA consultant for a complete soil test and a full corrective program designed for your acres – and have fun doing it, "The BioAg Way".

GFZ

ASKAN AGRONOMIST

Jon Trappe, PhD, Technical Agronomist

Q: What is biological farming and how does it compare to organic farming?

A: Most organic farming practices implement biological farming principles, but not all biological farming practices are organic. Biological farming, much like organic farming, treats the soil as a living ecosystem that works best when care is taken to limit our negative effects on soil life.

Gary Zimmer, one of the co-founders of Midwestern BioAg, has refined the biological farming approach since the 1980s and has published two books on biological farming. In them, he details that there are five principles of biological farming:

- 1. Test and balance your soils and feed the crop a balanced, supplemented diet. Use fertilizers that do the least damage to soil life and plant roots.
- 2. Apply pesticides and herbicides responsibly while relying on customized management practices to reach maximum genetic potential.
- 3. Create maximum plant diversity by using green manure crops (cover crops) and tight rotations.
- 4. Manage the decay of organic materials and the balance of soil, air, and water.
- 5. Feed the soil using carbon from compost, green manures, livestock manures, and crop residues.

Within the last decade or so, soil health has become a hot topic in the agriculture industry. There have been several new products that have been marketed as improving soil health. We know from our own experience that biological farming is the path to improving soil health, and that results may not immediately be visible.

Q: How can we measure biological improvements in soil?

A: Traditional soil tests are used to measure the chemical and physical properties of soils. Several biological tests have been developed to measure a soil's biology. These biological tests focus on measuring either the biological activity or the diversity of microorganisms present. However, both can be important tools for biological farmers, as they can demonstrate in the short term the impact biologically minded practices are having on soil life.

Most biological tests focus on measuring the biological activity of soil. This is most often done by measuring the amount of carbon dioxide the soil and microorganisms are respiring. Higher respiration rates are a sign of higher biological activity, which is positively related to nutrient mineralization and residue decomposition.

The Haney Soil Health Test is one of the most popular tests for measuring soil health, and soil respiration is an important component of this test. Some advanced soil analyses measure the diversity of soil microorganisms. Microbial diversity is an excellent indicator of soil health. A soil that has more diverse microbial populations is more resilient to environmental stresses.

These types of tests are currently more expensive and are mostly used in academic settings, but as the technology matures and they are more widely adopted in the Ag industry, we can better understand the impact our practices are having on soil biology.

Q: What is the role of soil carbon in biological farming?

A: Biological farming practices build soil carbon over time. Soil carbon is extremely important for plant and soil health, as the carbon cycle controls residue and nutrient mineralization. If measuring soil respiration from soil organisms helps measure short-term changes in soil health, measuring the actual carbon present in the soil helps understand the long-term changes in soil health. Soil organic matter is the partially decomposed plant and animal residue that is about 50% organic carbon. Biological farming works to conserve or even build soil organic matter over time.

In recent years, there has been growing interest at the public policy level surrounding sequestering soil carbon, which is a way of taking carbon out of the atmosphere and storing it in the soil as organic matter. In some cases, farmers are being paid based on the amount of carbon they have been storing in their soil. Ultimately, these programs are targeted to conserve and improve our existing soil. The agronomic practices that are encouraged and sometimes even required for farmers enrolled in these programs use much of the same principles as biological farming, such as minimal tillage and the use of cover crops (green manure).

Q: How can you incorporate more biological principles on your farm?

A: Biological farming is a process and not an endpoint. Parts of this process may be implemented immediately, and others may require more planning, but all will have a positive impact on your farm. "Advancing Biological Farming" (2011) and "The Biological Farmer" (2016) by Gary Zimmer and Leilani Zimmer-Durand were mentioned above and are robust resources if you would like to dive deeper into the biological farming approach. Similarly, reach out to the expert consultants at Midwestern BioAg about incorporating more biological farming principles on your farm.

ABOUT JON

Jon Trappe is a Technical Agronomist with Midwestern BioAg. Originally from Indiana, Jon received his Bachelor of Science degree in Agronomy from Purdue University, Master of Science in Horticulture from the University of Arkansas, and a Doctor of Philosophy from Purdue University in Agronomy. Jon's Ph.D. research focused on soil health within turf grass systems specifically on soil carbon and nitrogen cycling. He has 13 years of experience implementing applied research and extension outreach for the plant and soil sciences. Jon has been with the Midwestern BioAg team since September 2019.



Getting the perfectly balanced diet for all your herds' needs is not an easy thing to do. They need the right amount of forages, grains, proteins, minerals and salts. One part of the diet that might get overlooked due to its small size is minerals. Trace minerals are essential to the diet. They play a critical role in livestock's metabolic functions which include supporting growth and development, immunity and reproductive performance. Balancing these minerals is vital for livestock's well-being.

How much mineral does each cow need? Just let the animal tell you. Cattle are great self-regulators and they usually know about how much to consume in order to balance the minerals in their body. That's why I suggest our free choice program. Our program allows the livestock to choose the nutrients they need and replenish what might be lacking in their feeds. Our free choice minerals are essential to keeping a balanced diet for all of the stages in the livestock's life.

Choose between the six free choice blends that Midwestern BioAg offers.

- "O" Free Choice Buffer: a buffer source as an alternative or an addition to sodium carbonate
- "O" SK Blend: a free choice package designed to provide supplemental salt and kelp to livestock
- "O" Free Choice Mineral: a mineral package designed to supplement the nutritional needs of livestock on a free choice basis
- "O" Grazing Special: a free choice mineral package designed to supplement the nutritional need of grazing dairy cattle

- Redmond Salt with Garlic: A natural trace mineral salt with garlic for natural fly control
- **Thorvin Kelp:** Icelandic kelp with high levels of naturally chelated, bio-available nutrients.

From June 1 to August 31, receive a \$1/bag discount for each 40 bag (1 pallet) increment when purchasing any combination of free choice minerals. Some restrictions apply. Contact a consultant for further details

ABOUT BAILEY

I recently joined Midwestern BioAg as the Nutrition Specialist. I am from Barneveld, WI, and graduated from the University of Wisconsin - River Falls with a Bachelor's Degree in Animal Science. As a Nutrition Specialist, I consider the varied nutritional needs of different species and then formulate a balanced diet. I also formulate custom mineral blends by supplementing minerals that are deficient in the feedstuffs. Please reach out if you have any nutrition questions or if you need a formulated ration and/or a custom mineral blend for your herd. I will work with you to ensure your livestock feeding program is balanced and complete.

Contact Bailey at nutrition@midwesternbioag.com.



FROM THE GROUND UP

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