FALL 2026

Agrarian® SOLUTIONS

RISE

Relational. Integrity. Strategic. Excellence.



MOST VALUABLE MVG GENETICS

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Cow Start™ Complete

Setting Up First-Lactation Cows for Long-Term Success

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May 1 - Sept. 30, 2026

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RISE International

Strengthening Mycotoxin Management Across the Gulf

GET TO KNOW OUR TEAM

Agrarian Solutions Team



Mark Carpenter
Chief Executive Officer



Rob Hamaker
Vice President, General Manager



Larry Roth, Ph.D., PAS
Vice President of Nutrition



Nic Bradley
Director of Operations



Caroline Knoblock, MSc
Director of Nutrition



Scott Zehr
Regional Business Development Manager, East



Chad Christensen
Regional Business Development Manager, West



Dan Hoying
National Farm Program Manager



Cody Cline
International Account Manager



Kelbi Veenstra
Office Manager



Mary Taylor
Administrative Assistant



Kelly Bristle
Communications

A Letter from Agrarian Solutions Chief Executive Officer



"Performance is the result of how all the pieces work together."

Performance Is More Than What We Put in the Feed

Agriculture has never been short on technology. Today, producers have access to better genetics, more sophisticated nutrition programs, improved reproductive protocols, advanced diagnostics and more data than ever before. And yet, one thing remains unchanged: performance is the result of how all these pieces work together. That is an important part of how we think about Agrarian Solutions.

For more than 25 years, our mission has been simple: help others succeed. Today, that means looking beyond the product itself and focusing on the biological and management challenges that stand between an animal and its potential. We see that clearly in the conversations happening across the industry.

Heat stress isn't simply a temperature problem. It can become an inflammation, intake, rumen and feed-quality problem. Mycotoxins aren't simply something to bind in the ration; they can affect gut integrity, nutrient utilization, immunity and ultimately performance. Transition cows aren't facing a calcium problem alone. They are navigating a complex period involving energy balance, inflammation, mineral status, and immune function. The more we learn, the clearer it becomes that the animal doesn't experience these challenges separately.

Neither should we. That is why Agrarian Solutions continues to invest in science, research and conversations with producers, nutritionists, and industry experts. Through our products, our nutrition team, our field support and our *Ruminate This* podcast, we are working to connect the science with what is actually happening on farms.

But there is another lesson we continue to see. Technology only works as well as the management surrounding it. Two farms can have similar genetics, similar feed programs, and similar protocols, but achieve very different results. The difference is often found in execution, consistency, observation, and the people responsible for making thousands of decisions every day.

That is why our role is not simply to sell another product. Our role is to ask better questions.

- What is really limiting performance?
- Where are nutrients lost?
- What is happening before the problem becomes visible?
- Are we treating a symptom or protecting the animal from the underlying challenge?
- Most importantly, does the solution create enough value to justify the investment?

Those questions will continue to guide us.

We believe the future of livestock production belongs to solutions that are science-backed, economically responsible and practical enough to work in the real world. Our commitment is to keep listening, keep learning and keep bringing better tools and better information to the people who feed and care for livestock every day.

Because ultimately, our business isn't about selling products. It's about helping producers protect the investment they've already made in their animals, their people, and their operations.

DEFEND. PROTECT. PERFORM.

Sincerely,
Mark Carpenter, Chief Executive Officer



Rob Hamaker, Vice President, General Manager

Building on a Record Year

All Select Sires co-ops have seen increases in year-to-date 2026 sales. That's especially encouraging after a record sales year in 2025. The three products with the largest increases are:

- **Cow Start™ Complete**
- **CONVERT™ Day-One Calf Gel,** both the single-dose and multi-dose tubes
- **BioFresh® Microbial Bolus,** which continues to grow as it has become the go-to product for health alerts in cow monitoring systems



Cow Start™ Complete



CONVERT™ Day-One Calf Gel



BioFresh® Microbial Bolus

Cow Start Complete is seeing strong sales growth, and new research adds to the reasons to recommend it. Recent findings demonstrate its effectiveness in first-lactation cows.

Supplementing first-lactation cows with one Cow Start Complete bolus at calving reduced uterine infections and days to conception while improving first-service pregnancy rates and pregnancy rates after two services. Milk production was also numerically greater.

Introduce your customers to Cow Start Complete as part of their transition program: one bolus at calving for first-lactation cows and two boluses for cows in their second or greater lactation. Cow Start Complete is the only transition product recommended at calving for first-lactation cows.

As always, we appreciate your sales efforts and partnership! Wishing you a successful finish to 2026 and a strong selling season!

NEW OFFERS ON THE HORIZON.

Upcoming Promotions



November/December 2026
PROMO



January/February 2027
PROMO



LET'S CELEBRATE

Product Champions

See what's working on farms and how fellow cooperative team members are using Agrarian Solutions products to help their customers.



Bekah Meller

Genetic & Reproductive Advisor and CowManager® Specialist
Ohio | 4 years

Using data to identify opportunities
"Looking at how long eating and rumination decrease before and/or after calving, along with milk production data, when available, and first-service breeding information can help start a conversation about early-lactation performance. These factors can provide valuable insight into how cows transition into lactation and ultimately play a role in reproductive success and future lactation performance."

Connecting performance to product solutions
"This can lead to the conversation of how we use BioFresh® Microbial Bolus to help cows improve intakes and rumination post-calving. BioFresh can readily pay for itself just in milk gains and improved first-service conception rates."

Uncovering a mycotoxin opportunity
"Our team worked with a herd that had high levels of mycotoxins in their feed. Intakes were low in the dry cow pens, and the CowManager alerts showed us when intakes started to drop during the dry period. We were able to show this data to the producer, and he was willing to utilize BioCycle® Plus to try to maintain intakes prior to calving."



Brandon Boogard

Genetic and Reproductive Advisor/ CowManager Specialist
Washington & Eastern Oregon | 16 years

Putting data behind the recommendation
"My work with CowManager gives me confidence we can measure the response in real time. Cows that get BioFresh Microbial Boluses at freshening consistently show increased eating and rumination time vs. cows that do not."

A protocol that makes a difference
"After starting with the BioFresh Bolus protocol for every cow after freshening, they noticed a significant drop in incidences of post-fresh health issues, as well as improved production and reproduction throughout the lactation."

A reminder for producers
"The best advice I give to any dairy producer is you only get one chance to get that cow off to the best start for her lactation, and BioFresh Bolus delivers the best bang for your buck."



Greg Silva

Area Sales Manager
Central California | 30 years

Recognizing the opportunity
"Whenever I see fresh cows look like they are 'off feed' or 'a little sluggish', I recommend BioFresh Microbial Bolus. They give those cows a quick boost to help them feel better and get them back to eating and ruminating properly. One or two treatments usually do the trick.

Cow Start Complete is one of my favorite products to get cows off to a strong start after calving. When administered directly after calving, fresh heifers and cows avoid that sluggish period when they dip from a calcium deficiency. Instead, they stay alert and strong through their transition period."

A recommendation worth sharing
"I would suggest everyone give these products a try. It's a small and easy investment that can pay dividends in the transition and the overall health of your fresh cow program."

Let the customer tell the story
"The absolute proof that these products work comes from asking people that take care of the cows every day. I recently asked the herdsman of a dairy using Cow Start™ Complete about his results. He mentioned they almost never have to administer bottles of calcium to fresh cows since they started using Cow Start Complete. He also said the cows cleaned faster and easier."



Chad Walker

Manager of Distribution Operations & Logistics, Select Sires Member Cooperative | 5 years

A Partner You Can Count On

"What stands out about Agrarian is the quality of the products and the people behind them. On the front lines, it's the availability of our rep, Dan Hoying. Dan's knowledge and desire to assist us with questions are impeccable. Agrarian is always just a phone call away, and that speaks volumes when we need information quickly.

The products work, and we know they work. That's important when building relationships with those who spend their hard-earned dollars on Agrarian products. Because of that, we can sell confidently. We know we can improve and prevent health issues with Agrarian products."



Caroline Knoblock, MSc, Director of Nutrition

Setting Up First-Lactation Cows For Long-Term Success

First-lactation cows have the greatest genetic value of any cow group on the dairy, yet they may also experience some of the greatest inflammatory challenges following calving. The onset of lactation, first-time calving, introduction to older cows, and adjustment to the milking parlor all create additional stress for these animals.

Metritis is often more prevalent in first-lactation cows than in other lactation groups. Metritis and other transition challenges in the first lactation can increase the risk of retained placenta, stillbirth, and reduced pregnancy per service in subsequent lactations[1]. Helping first-lactation cows successfully resolve inflammation can deliver economic benefits today and well into the future.

The Nutritional Challenge After Calving

Calving, inflammation, and metritis places a significant nutritional demand on the animal, potentially reallocating nutrients away from milk production, reproduction, and growth.

This challenge occurs at a time when nutrient demands are already high. Research indicates that dry matter intake declines as calving approaches and increases only gradually after calving. For first-lactation cows, overcrowding, competition with older and larger cows, and adjustment to a new diet can further limit intake. The result can be a significant nutrient deficit even when the ration is correctly formulated. How can this nutrient deficit be addressed when feed intake is limited?

Cow Start™ Complete: Targeted Support at Calving

Agrarian Solutions' unique Cow Start™ Complete is formulated to help overcome these transition challenges. At calving, a single bolus provides first-lactation cows with more than 70 key micronutrients, including the antioxidants selenium yeast and vitamin E. The bolus slowly dissolves in the rumen over approximately 48 hours, providing targeted nutritional support during the critical period immediately following calving. This helps supply the nutrients needed to support efficient immune function.



Research in First-Lactation Cows

	Farm A		Farm B	
	No Bolus	Cow Start Complete	No Bolus	Cow Start Complete
Number of Animals	29	19	100	100
Uterine Infection	10.3%	0%	17%	6%
Days to Conception	95	87	98	94
1st- service conception rate	41%	53%	45%	50%
Pregnancy after 2nd service	55%	84%	70%	72%

Two farms with persistent first-lactation metritis challenges provided a total of 248 heifers for a research study evaluating the benefits of administering a single Cow Start Complete bolus at calving. Veterinarians evaluated first-lactation cows for metritis on day seven after calving at Farm A and day nine at Farm B. On Farm A, metritis decreased from 10.3% in control cows to 0% in cows receiving a single Cow Start Complete bolus. At Farm B, metritis decreased significantly ($P<0.05$) from 17% in control cows to 6% in cows receiving Cow Start Complete.

Metritis and other health issues after calving reduce nutrients available for developing oocytes, resulting in early pregnancy loss. Additionally, metritis creates a poor environment for embryo implantation, adding to early pregnancy losses and lower first service conception rates.

First service conception rate was improved by Cow Start Complete supplementation on both farms; Farm A improved ($P<0.05$) from 41% to 53%, and Farm B improved from 45% to 50%. When health after calving improves, first service conception improves. These findings point to the potential for reduced post-calving inflammation and improved nutrient allocation during a critical period in the first-lactation cow's productive life.

First-lactation cows represent the future of the dairy herd. Supporting their ability to manage metritis and post-calving inflammation is essential for helping them transition successfully into lactation, reproduce efficiently, and remain productive throughout their lifetime. Cow Start Complete provides targeted nutritional support when first-lactation cows need it most.

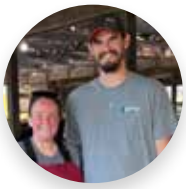
References:

[1] Borchardt et al. (2024). *Journal of Dairy Science*, 107:9706–9718.
[2] Caldeira et al. (2025). *Biology of Reproduction*, 113:1132–1154.



"Cow Start Complete has become part of our fresh-cow protocol. We give one bolus to first-lactation animals and two to older cows, and we've seen cows and heifers get off to a healthier start and transition better after calving. It helps keep fresh cows on track. It's a good product, it works, and for the cost, it's well worth it. I'm 100% behind it."

Jack Fisk
Fisk Farms,
Sand Lake, Michigan



"We've been using Cow Start Complete since the beginning of the year, and it's nearly eliminated transition-cow problems. We haven't had a single case of milk fever, and it's replaced the need to administer two calcium boluses 12-24 hours apart."

Sawyer Johnson and Maddie Nielsen-Johnson
Gary Nielsen Dairy,
Lakeview, Michigan



"I'm really impressed with Cow Start. Over the winter, we had some trouble with milk fever. Since we've been giving Cow Start to our fresh cows regularly, I can't tell you the last time I've had to treat milk fever with IV calcium."

Josh Satterfield
Calfee Riverland Farms,
Charleston, Tennessee

HUB

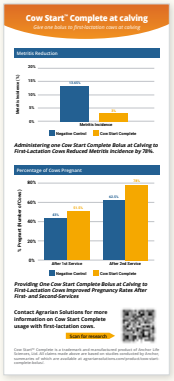
The right information, right when you need it.

Not signed up?

Get access to the tools that support your sales.

SCAN TO ACCESS THE AGRARIAN HUB

AgrarianHub.com



Cow Start™ Complete First-Lactation Research

Show producers the first-lactation research and how giving one bolus to first-lactation cows at calving improves performance.



NEW!

WATCH VIDEO



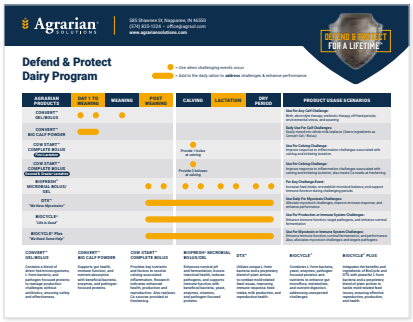
BioCycle® Plus

Enhanced with phytogenics, BioCycle Plus is research-tested for gut integrity and lever health.



BioCycle® Showcase

BioCycle Showcase provides digestive support designed for growth, blook, and show-ring performance.



Defend & Protect Dairy Program

Updated treatment guide now includes Cow Start Complete for first lactation cows.



Dan Busch, Select Sires Member Cooperative Area Sales Manager

"I like the Agrarian Hub because it's easy to use and information is at my fingertips, regardless of what product I need info for.

Sometimes a producer brings up a health issue they are dealing with when I am at their farm/ranch and I can research it on the Hub to recommend the correct product/solution. Many times, producers ask questions about certain products, and I can get answers right away from the Hub.

Take the time to navigate the Hub before you get to a customer. There are sales tips, videos and testimonials on all the Agrarian products to help you understand these products better."

NEED PRINTED MATERIALS?

Ask your co-op for printed copies of product rack cards and sales resources.

REMEMBER

Spanish-language resources are available on the Agrarian Hub.


Larry Roth, Ph.D., PAS, Vice President of Nutrition


Caroline Knoblock, MSc, Director of Nutrition

MAY 1, 2026 – SEPTEMBER 30, 2026

Mycotoxin Summary Results

During Summer and Fall 2026, 95% of all corn silage samples had multiple mycotoxins, and almost every state posted corn silage samples with DON at a high-risk level. Co-exposure to more than one mycotoxin puts additional stress on animals beyond the single mycotoxin challenges. DON harms intestinal cells, allowing other mycotoxins to breach the body's defenses. It is troubling to see the highly toxic T2/HT2 appear more consistently. Even very minor levels of T2/HT2, combined with high levels of DON, pose significant health challenges for the animal. Feeds with multiple mycotoxins at medium risk contaminations may pose greater consequences than feeds with a single mycotoxin at a high-risk concentration.

Corn silage samples from Iowa, Minnesota, and Wisconsin were at high-risk contamination levels for DON and zearalenone during the survey period, with fumonisin averaging in the high-risk contamination level for Minnesota samples. The corn silage high-risk mycotoxin contamination levels directly translated to high TMR mycotoxin concentrations of DON and medium-risk concentrations of zearalenone. The TMR samples were also contaminated with fumonisin and T2/HT2, but at low-risk levels.

Corn silage samples in Ohio, Michigan, and Indiana continued the trend of high-risk DON contamination. The corn silage samples also contained multiple mycotoxins, with T2/HT2 and fumonisin present in these samples but at low-risk levels. Ohio corn silage samples exhibited high zearalenone contamination, but zearalenone was at a medium-risk level in Michigan and low contamination concentration in Indiana. The TMR samples in Michigan and Indiana are similar for high DON contamination, medium-risk zearalenone, and low-risk T2/HT2 and fumonisin concentrations. The Ohio TMR samples averaged a medium-risk level for DON, and low contamination concentration for zearalenone, T2/HT2 and fumonisin.

The Atlantic states, especially Virginia, exhibited a reprieve from 2024's extremely high-mycotoxin contamination, yet samples still contained multiple mycotoxins. Corn silage from Virginia averaged in the medium-risk contamination category for aflatoxin, DON, zearalenone, and T2/HT2, and high-risk level for fumonisin. Aflatoxin was detected consistently in areas of Virginia experiencing drought-stressed corn. Corn silage in North Carolina fared better and was medium-risk levels for DON and fumonisin and low risk for zearalenone. TMR samples from North Carolina were high-risk levels for DON, indicating feed ingredients other than corn silage are sources of DON, medium-risk contributors for fumonisin and low-risk sources for zearalenone. The TMR samples from Virginia tested at medium-risk contamination concentrations for DON, zearalenone, T2/HT2, and fumonisin.

Pennsylvania and New York corn silages were contaminated at high-risk levels for DON and also contained a mixture of zearalenone at medium-risk levels and T2/HT2 at low-risk levels. Fumonisin levels were medium-risk in Pennsylvania but dropped to low-risk levels farther north into New York and the Northeast. The TMR samples throughout the Northeast followed this trend with consistent exposure to multiple mycotoxins. Compared to past years the average DON concentration is lower, now at medium-risk concentrations, but when combined with the medium-risk zearalenone and low amounts of T2/HT2 and fumonisin, care should be taken when feeding vulnerable groups of animals such as pre-fresh, fresh, and high cows.

You can depend on the DTX™ technology and phytogenics to defend and protect your cattle against the major mycotoxins whether alone or contaminating the diet in combinations.

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Mycotoxin Report



Table 1

State	Total DON, ppm	Zearalenone, ppb	Total T2, HT2, ppb	Total Fumonisins, ppm
AZ	0.25	ND	ND	ND
IL	0.91	114	ND	0.46
IN	1.27	105	27	0.40
IA	0.97	168	ND	ND
MD	0.96	112	ND	0.33
MI	1.18	103	42	0.39
MN	1.05	242	24	0.48
NY	0.85	76	24	0.11
NC	1.05	56	ND	1.32
OH	0.68	51	ND	0.23
PA	0.96	181	42	0.83
SD	0.74	45	ND	ND
VA	0.79	130	190	1.10
WI	1.12	206	23	0.34

= nd - none detected
= low risk
= medium risk
= high risk

ppm = parts per million
ppb = parts per billion

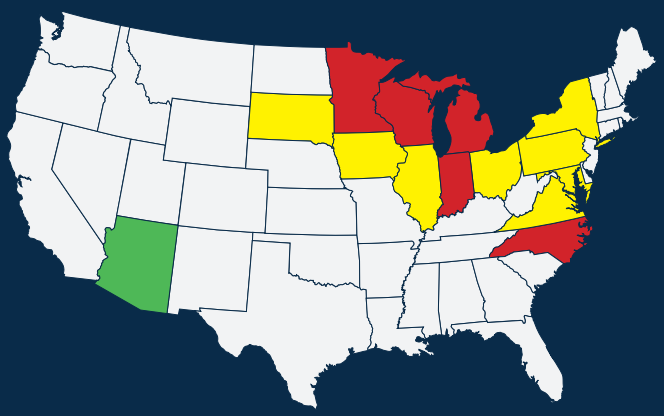
START DATE: **MAY 1, 2026** | END DATE: **SEPTEMBER 30, 2026**

NO. OF SAMPLES 278

1 DON = DON + 3-Acetyl-DON + 15-Acetyl-DON; FUM = fumonisin B1 + fumonisin B2; T-2 = T-2 toxin + HT-2 Toxin

Figure 1

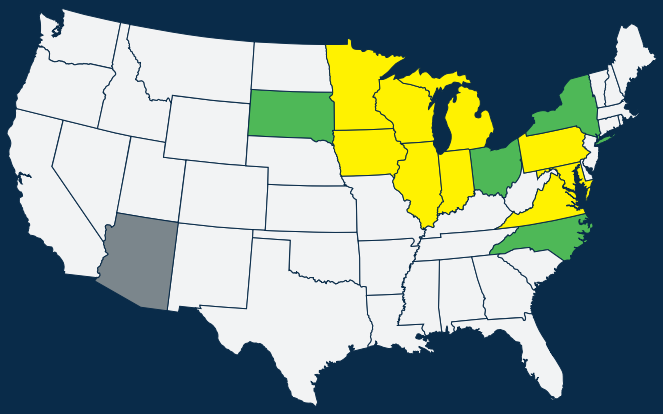
DON



ppm (parts per million)

nd | <.30 | .30-1.00 | >1.00

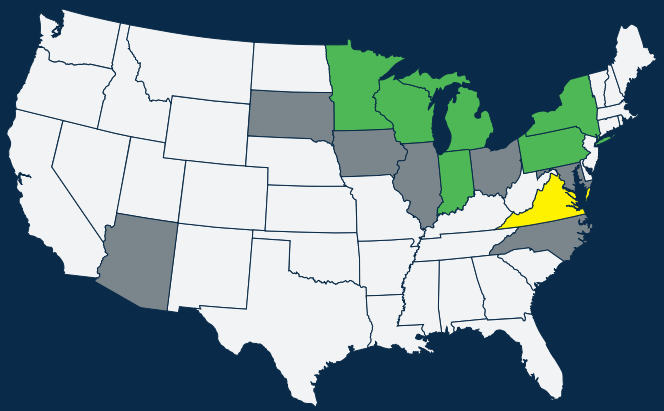
Zearalenone



ppb (parts per billion)

nd | <100 | 100-300 | 301+

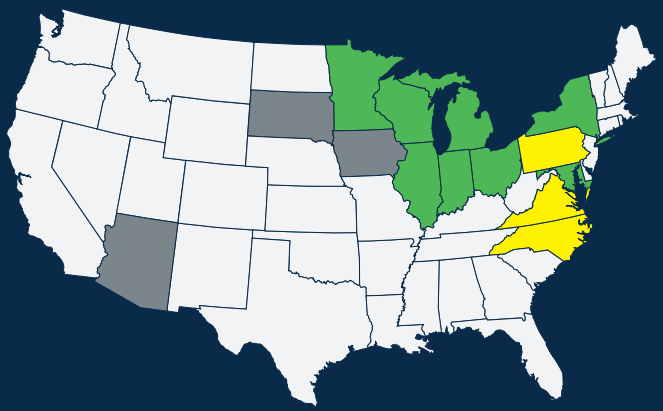
T-2 Toxin



ppb (parts per billion)

nd | <75 | 75-150 | 151+

Fumonisins



ppm (parts per million)

nd | <.60 | .60-1.50 | >1.50

State Averages (all values in ppm or ppb)

Table 2

State	Total DON, ppm	Zearalenone, ppb	Total T2, HT2, ppb	Total Fumonisins, ppm
AZ	ND	ND	ND	2.50
IL	1.13	210	ND	0.10
IN	2.16	146	64	0.44
IA	3.78	758	23	0.30
KS	1.71	129	ND	1.17
KY	0.09	ND	ND	ND
MI	1.72	89	37	0.40
MN	2.19	389	68	2.29
NY	2.55	261	65	0.26
NC	0.67	54	ND	1.12
OH	2.76	300	28	0.12
PA	1.26	181	53	1.09
SD	1.53	70	ND	ND
VA	0.92	215	90	1.76
WI	2.18	271	25	0.32

= nd - none detected
= low risk
= medium risk
= high risk

ppm = parts per million
ppb = parts per billion

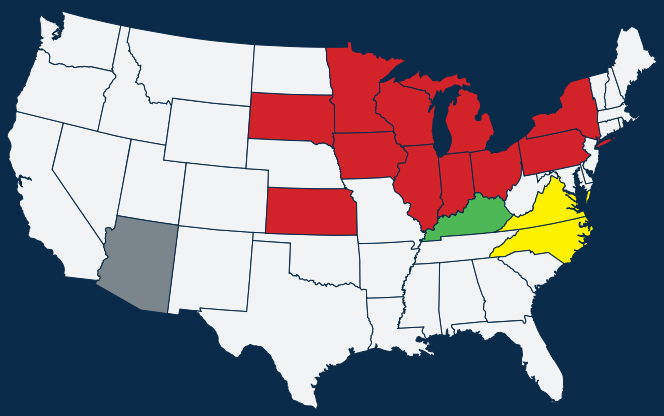
START DATE: **MAY 1, 2026** | END DATE: **SEPTEMBER 30, 2026**

NO. OF SAMPLES 239

1 DON = DON + 3-Acetyl-DON + 15-Acetyl-DON; FUM = fumonisin B1 + fumonisin B2; T-2 = T-2 toxin + HT-2 Toxin

Figure 2

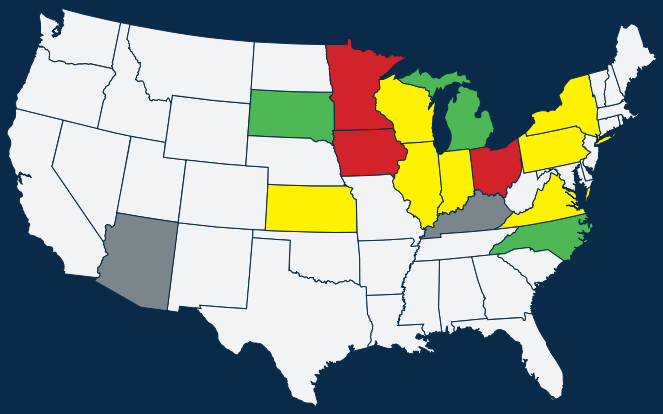
DON



ppm (parts per million)

nd | <.30 | .30-1.00 | >1.00

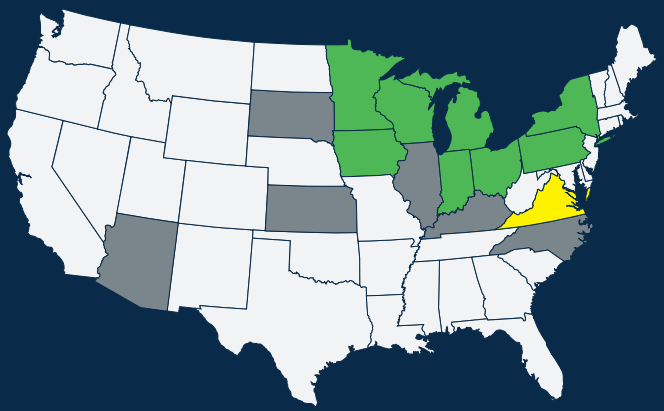
Zearalenone



ppb (parts per billion)

nd | <100 | 100-300 | 301+

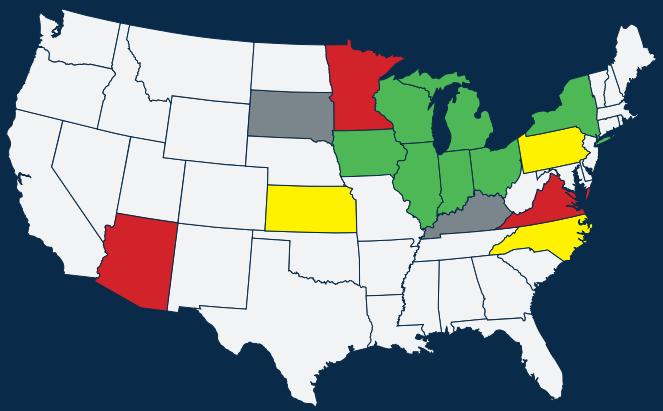
T-2 Toxin



ppb (parts per billion)

nd | <75 | 75-150 | 151+

Fumonisins



ppm (parts per million)

nd | <.60 | .60-1.50 | >1.50

State Averages (all values in ppm or ppb)

The People and Purpose Behind Agrarian Solutions

RISE

Meet Nic Bradley, Agrarian Solutions' Director of Operations, who has spent 10 years helping shape how we work and serve our customers. Discover what happens behind the scenes and see how our RISE values guide the work we do every day.

How would you describe Agrarian Solutions?

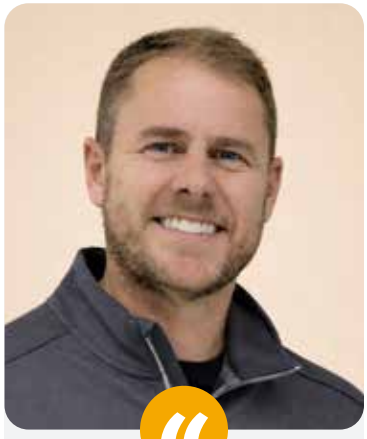
Agrarian Solutions is a team of talented servant leaders who are passionate about helping others succeed in the animal health industry. We have a great group of individuals who find fulfillment in serving the people they work with.

We have fun, we work together, and we're constantly pursuing excellence. Most importantly, our RISE core values aren't just words on a wall, they are values we strive to live out every day.

How does your role as Director of Operations support the team and customers?

My role touches many areas of the business, including budgeting, marketing strategy, inventory management, purchasing, pricing, operating procedures, order fulfillment, and vendor relationships. At the heart of my role is supporting the Agrarian team and making it as easy as possible for our customers to work with us.

Our RISE core values are at the forefront of my mind every day. Relational is especially important to me because I believe everything begins with relationships. When we take care of our people, build trust with our partners, and genuinely serve our customers, the rest of the business has a strong foundation to grow from.



"I believe everything begins with relationships."

Nic Bradley
Director of Operations

Which RISE value resonates most with you, and how do you live it out in your work?

Relational would be the RISE value that resonates most with me. My "why" in life is to listen, encourage, serve, and bring people together around a common purpose so that they feel loved by God and valued by others.

I feel like my purpose is deeply connected to relationships, and Agrarian gives me a great opportunity to live that out every day. Building relationships and helping people feel valued is something I want to carry with me every day at work.

What's been your favorite project at Agrarian, and why?

One of my favorite projects has been helping implement the Entrepreneurial Operating System (EOS) at Agrarian. That process gave us the opportunity to establish our RISE core values, create our 10-year, 3-year, and 1-year goals, solidify our marketing strategy, and put many of our standard operating procedures in place. It has been rewarding to see how those systems have helped bring clarity and consistency to the way we operate as a team.

What excites you about Agrarian's future?

What excites me most are the people. We have a great team at Agrarian, and we have the privilege of serving a wonderful industry filled with people who share our desire to help others succeed.

When you have the right people in the right seats, all rowing in the same direction and focused on serving others, the opportunities are tremendous. We've been around for 30 years, but in many ways, it feels like we're just getting started.

We have great research-backed products, amazing technology, and a team with a genuine mission to help others succeed. I'm incredibly excited about what's ahead and believe the future is very bright for Agrarian.

What are you passionate about outside of work?

I'm passionate about my family, especially supporting my two daughters in the things they love to do. I also enjoy mentoring youth and watching sports, particularly North Carolina basketball and Notre Dame football. I really enjoy investing in people and being able to encourage them along the way.

OUR RISE VALUES

R Relational

I Integrity

S Strategic

E Excellence



RISE
INTERNATIONAL

Strengthening Mycotoxin Management Across the Gulf

Over recent years, NutriTox and SynerTox have continued to strengthen their position within IFT Gulf's mycotoxin-management portfolio, with growing adoption across feed mills, poultry farms, dairy farms and veterinary pharmacies.

NutriTox has built a strong presence in the UAE feed-mill sector, gaining significant market share in a highly competitive anti-mycotoxin market. Its continued growth reflects increasing customer confidence in the product, reinforced by consistent technical support and close follow-up.

Building on this progress, IFT Gulf is now expanding its focus within the dairy sector. Following successful use of NutriTox at one of the UAE's major dairy farms, the product has been introduced into additional dairy operations. Further growth will be supported through targeted technical visits, field support, and close collaboration with the Agrarian Solutions team during their upcoming visit to the UAE.

SynerTox is also gaining strong momentum in the poultry sector. With Gulf climatic conditions increasing the risk of mycotoxin exposure, effective mycotoxin management remains an important priority for poultry producers. SynerTox has already been adopted by several large poultry farms representing a significant share of UAE broiler production. It has also gained a significant market share through veterinary pharmacies serving smaller poultry farms, with repeat orders reflecting increasing customer confidence and product acceptance.

At IFT Gulf, our approach goes beyond product supply. We place strong emphasis on technical support, customer education, and field-level engagement through farm and feed-mill visits, nutritional consultations, feed-sample analysis, educational meetings, and practical tools that help customers better understand the return on investment of an effective mycotoxin-management program.



"With my experience in dairy and fattening farms, my main priority is maintaining consistent protection against the potential risk of mycotoxins, particularly since many of our feed ingredients are imported and may be exposed to variable storage and weather conditions.

Since using NutriTox at the standard inclusion rate of 5 g/head, we have not observed clinical problems associated with mycotoxins, which gives me greater confidence in our feeding program. Our dairy herd is currently averaging approximately 35.5 liters of milk per cow per day while maintaining good reproductive performance.

Based on our positive experience, NutriTox has become an important part of our mycotoxin management program."

Eng. Emad Zaky
Nutritionist & Animal Production Supervisor
Al Dahra Dairy Farm, UAE





Remo Wicki, Select Sires Canada

She Wasn't Supposed to See Noon

I got my start with Select Sires Canada in February 1998. In 2002, I spent a brief four months with a competitor before returning to Select Sires Canada. I guess the Eagles were right: you can check out, but you can never leave!

We were introduced to the Agrarian product line around 2000. Nearly 30 years into my career, one of my most gratifying moments came about a year ago, with a tube of Convert™ Day-One Calf Gel.

At this particular herd, they had bought a box of Convert during my previous visit. I arrived around 10:00 in the morning and was talking with the son in the office when I noticed the box was still sitting exactly where he had left it the last time I was there.

Not long after, his father came in from outside and told his son that one of their calves probably wasn't going to see the noon hour.

She was four days old and hadn't had anything to drink in two days. What made it even more unfortunate was that this wasn't just any calf. She was born to their best cow, who they lost shortly after she calved. This calf was all they had left of her.

I said, "Why don't we try some Convert on her?"

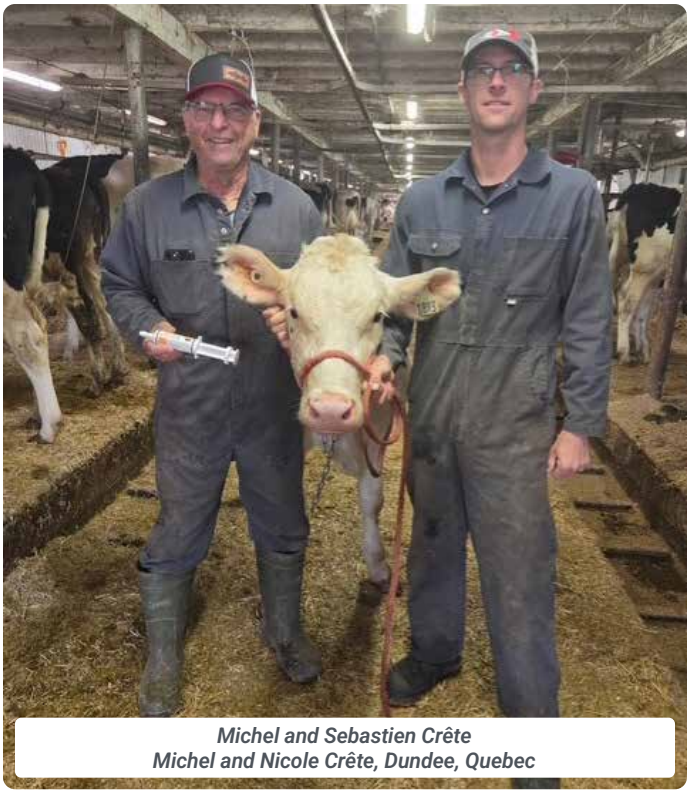
They both kind of chuckled. They had pretty much given up on the calf and told me they were done putting money into her.

So, I said, "I'll pay for the tube if I have to. It's worth a shot."

We went out to the calf barn, and sure enough, she was lying on her side, somewhat bloated, with not a whole lot of life left in her. We gave her half a tube – 30 mL.

Within about a minute, she started lifting her head a little and making a chewing motion, almost as if she were looking for milk. I told the owner, "Go get some milk."

She drank maybe a litre. Not a whole lot, but she drank.



Michel and Sebastien Crête
Michel and Nicole Crête, Dundee, Quebec

The owner let out a few swear words (in a good way!). He couldn't believe what he was seeing. To be honest, neither could I.

I told him to give her the other half of the tube later that afternoon and to let me know that evening how she was doing. That night, the son texted me: "She's still alive." I sent him a big thumbs-up.

The next morning, he sent me a picture. The calf was standing at the front of her hutch, drinking from the bottle in the holder.

Knowing they had already lost her mother, their best cow, made that picture even more meaningful. After nearly 30 years doing this job, there aren't too many moments that will be topped by that one.

> ***"I'll pay for the tube if I have to. It's worth a shot."***

Read Remo's Full Story

How he went from "we sell semen, not products" to 25 years with Agrarian, plus his advice for anyone who wants to sell more products.



Scott Zehr, Business Development Manager and Host of Ruminate This

Ruminate This: Conversations Worth Revisiting

One of my favorite things about hosting Ruminate This is that sometimes the best conversations start with a pretty simple question. How much is this costing us? Why does that happen? Or, occasionally, are we even asking the right question in the first place?

Over the past several months, those questions have taken us from mycotoxins and heat stress to corn silage and even the human side of agriculture. Here are a few conversations worth revisiting.

How Much Are Mycotoxins Really Costing You?

We often talk about mycotoxins in terms of contaminated feed or obvious clinical problems. But what about the performance we never knew we lost?

Dr. Larry Roth joined us to explore how mycotoxins can affect gut integrity, immune function, nutrient allocation and reproduction. The conversation included research from a commercial dairy trial involving more than 900 cows, where pregnancy-per-service improvements were observed in both AI and embryo-transfer programs using DTX™ technology.

The bigger question may be what happens before we ever recognize a "mycotoxin problem." If nutrients are being redirected from milk production, reproduction and growth toward immune defense, the economic impact can begin long before we see something obviously wrong.

Listen to the May 19 Dairy Podcast Show: Mycotoxins and Gut Health.

What If Heat Stress Is the Multiplier?

We all know what heat stress looks like. Fans are running, sprinklers are on and dry matter intake starts slipping. But what if temperature isn't the whole problem?

Dr. Roth and I took a different look at summer heat stress not simply as an isolated environmental challenge, but as a multiplier of challenges already present in the cow. Mycotoxins, marginal nutrition, inflammation and reduced intake don't disappear when temperatures climb. They can stack.

That discussion took us deeper into gut integrity, oxidative stress, altered blood flow, liver function and immune response. It also raises an important management question: instead of only trying to cool the outside of the cow, what can we do nutritionally to help support what is happening inside her?

Listen to episode 73 to learn more.

Corn Silage: Protecting the Value of Every Ton

Few decisions made on a dairy have consequences that last as long as corn silage harvest. We get a relatively short window to harvest a crop that we'll ask cows to turn into milk for much of the next year.

In another conversation, Dr. Roth walked through the details that determine how much of that value actually makes it from the field to the cow: harvest timing, kernel processing, dry matter, packing density, storage and feedout.

Each decision affects more than forage quality. Shrink, mycotoxin risk, feed efficiency, milk production and components ultimately turn corn silage management into an economic conversation. The goal isn't simply filling the bunker. It's protecting the value of every ton we put into it.

Hear more on episode 77.

Is Burnout Really About Working Too Much?

Not every important conversation on *Ruminate This* happens inside the cow.

After reading yet another tragic story from within agriculture, I found myself wrestling with a question I couldn't shake: is burnout really caused by long hours, labor shortages, milk prices and financial pressure? Or are those things sometimes symptoms of something deeper?

In a solo episode, I explored burnout, resilience, leadership and the weight so many people in agriculture quietly carry every day. There's no feed additive, management protocol or simple checklist for this one. But that doesn't make the conversation any less important.

Because ultimately, Ruminate This is about more than cows. It's about asking better questions about the animals, businesses and people that make agriculture work.

Listen to episode 74.

New Episodes Every Second & Fourth Monday!

RUMINATE THIS PODCAST

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First-lactation cows: The inflammation problem that can follow them for life

First-lactation cows face unique challenges at calving. Reduced feed intake, social stress and inflammation can affect milk production, fertility and long-term herd performance.

On ***The Dairy Podcast Show***, Dr. Liz Eckelkamp and Agrarian Solutions Vice President of Nutrition, Dr. Larry Roth discuss the impact of calving-related inflammation, research evaluating Cow Start™ Complete and strategies to support first-lactation cows through this critical transition.

"Incidence of metritis at the first lactation leads to a cascade of events through subsequent lactations or calvings that reduces her ability to stay in the herd and live up to her genetic potential."



Dr. Liz Eckelkamp
HOST



Dr. Larry Roth
GUEST

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the dairy podcast show

IN THIS EPISODE

- Why first-lactation heifers are uniquely vulnerable around calving
- Why these animals often have reduced feed intake during the transition
- How social stress and competition can further limit intake
- Why the uterus represents a major nutritional and immune challenge
- How inflammation redirects nutrients away from milk production and reproduction
- The connection between uterine health and future fertility
- Why first-lactation metritis can have consequences beyond the first lactation
- What research has revealed about retained placenta, rebreeding, and culling
- Practical ways to support feed intake and immune function
- The role of antioxidant and mineral support during the transition
- Research evaluating a single Cow Start Complete bolus in first-lactation heifers

Agrarian® SOLUTIONS

585 Shawnee Street
Nappanee, IN 46550

Contact Us

(574) 825-1224
office@agrsol.com
agrariansolutions.com

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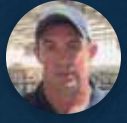
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NOW WITH PHYTOGENICS



Defend and Protect for a lifetime with the newly added research-proven protection against Cryptosporidium and Coccidia!

"I had a 5,000 cow producer use the new Convert Calf Gel on scouring calves and saw a drastic improvement after. The producer was so convinced, he has ordered more."



Justin Williams,
Select Sires Member Cooperative
A.I. Technician