





Designed, Manufactured, and Tested in Middletown, Connecticut, USA

PAS Type C Power Actuated Concussion Type Stunner The PAS Type P Penetrating Cartridge Stunners are designed for easy to use, humane stunning on a variety of small to large animal types. With a comfortable, ergonomic handle and ultra-durable construction to reduce the need for maintenance. And different available cartridge strengths depending on usage.







Jarvis Products Corporation 33 Anderson Road Middletown, CT 06457 United States of America www.jarvisproducts.com sales@jarvisproducts.com T 860-347-7271 F 860-347-6978





# CONTENTS

MARCH 2023 / VOLUME 236 / ISSUE 3



## ▶ FEATURED CONTENT

#### PROCESSOR PROFILE: AMERICAN OSTRICH FARMS

The Idaho-based operation recently launched a USDA-inspected processing capability.

### SPECIAL REPORT: REGULATORY UPDATE

Labor and food safety issues top the industry agenda.

### **AMC 2023**

Getting modern and personal at the 2023 AMC event.

### FIGHT FOR FOOD SAFETY

USDA can – and should – help consumers help themselves.

### **COMMENTARY: AMSA**

Economic losses due to beef discoloration in the U.S.



processing lines.

# **COVER STORY**

Much like the nation this American culinary icon represents, burger marketers exercise their freedom to choose how they express their creativity.

EDITOR'S NOTE
WEBSITE HIGHLIGHTS

**AD INDEX** 



## GRASS FED FOODS' JEFF TRIPICIAN TALKS BURGERS

Are burgers becoming an affordable luxury for consumers? Jeff Tripician, CEO of Grass Fed Foods LLC (Teton Waters Ranch and Sun Fed Ranch) shares some insights on how consumers are defining value for both foodservice and at-home eating experiences.

# **KEEP IT MOVING KEEP IT SAFE!**

WITH LUBRIPLATE H1 REGISTERED **FOOD GRADE LUBRICANTS** 







Lubriplate NSF H1 Registered Lubricants do more than keep your machinery running at its best. They free you from the potential chemical hazard risks posed by non-food grade lubricants. In fact, using 100% Lubriplate H1 Lubricants throughout your plant can significantly simplify your HACCP program by completely eliminating lubricants as a potential chemical hazard.

High Performance Synthetic and Pure USP White Mineral Oil-Based Lubricants.

NSF H1 Registered Food Machinery Grade for Safe, Non-Toxic Lubrication.

NSF/ISO 21469 Certified

FDA COMPLIANCE - With Regulations 21 CFR 178.3570, 21 CFR 178-3620, 21 CFR 172-878, 21 CFR 172.882 & 21 CFR 182 G.R.A.S.



















Newark, NJ 07105 / Toledo, OH 43605 / 800-733-4755
To learn more visit us at: www.lubriplate.com







Complimentary Extra Services Package







# PROVISIONER ONLINE.com



# TOP-VIEWED NEW CONSUMER PRODUCTS:

- 1. Perdue debuts two new product lines: Flavor-Infused Chicken and Chicken Plus Snackers
- 2. Gary's QuickSte growth

Reduce Water & Time for Washdown by

50%

3. Bacon bouquet:

- 4. Imagic Plant-Based Chicken Products from Kansas Protein Foods and ADM acquisition
- 5. Dietz & Watson is introducing Philadelphia to the Bird Dog



# MOST-POPULAR FEATURES:

1. Will USDA declare Salmonella an adulterant in raw animal products?

Learn More 🗢



- 4. Kerry unveils taste trends for 2023
- 5. Seafood Report 2023: Supply challenges and market opportunities





V Corios

W Corios

**SSV Series Drum Motors** 

Although it might n corner. For many Americans, that means it's about to be backyard burger time. And while they are a seasonal favorite, burgers' enduring appeal extends far beyond cookouts.

Our Burger Report 2023 takes a look at how marketers are addressing consumer needs for affordable and enjoyable burger creations – whether at home or at a restaurant.

Also in this issue, read about American Ostrich Farms and their recent expansion that added a USDA-inspected processing capability.



FRED WILKINSON



# BUSY FAMILIES DESIRE CONVENIENCE AND AFFORDABILITY, BUT ALSO CRAVE DELICIOUS BURGER FLAVOR.

BY FRED WILKINSON **CHIEF EDITOR** 

Photo by Fred Wilkinson

One of the keys to the burger's enduring popularity is the iconic American patty's wide open possibilities for creativity.

At the Backdoor Grill in Steamboat Springs, Colo., the menu's lineup of "Old School Burgers' is joined by its "New School Burgers." The New School roster includes the How Ya Doin (with cream cheese, jalapeno jelly and bacon) and the Black Mamba 24 (with Snake River Farms Kobe beef, black truffle aioli, smoked sautéed onion, fried egg, and Gouda on a brioche bun).

"The last decade has seen the wild side of what is included in burgers -- and burger imitators -- with niche products including everything from peanut butter to mushrooms, but we are staying true to our roots and offering premium ground beef," said Wes Wondercheck, vice president of sales for Greater Omaha Packing Co. Despite the continual pushing of boundaries for what a burger can be, perhaps the largest trend is simply that burgers continue to

be Americans' go-to meal, said Jim Rogers, senior vice president for Creekstone Farms Premium Beef LLC. "Ground beef and burgers are a budget-friendly protein consumers know to be flavorful and versatile."

Some chefs appreciate the appeal of a back-to-basics burger.

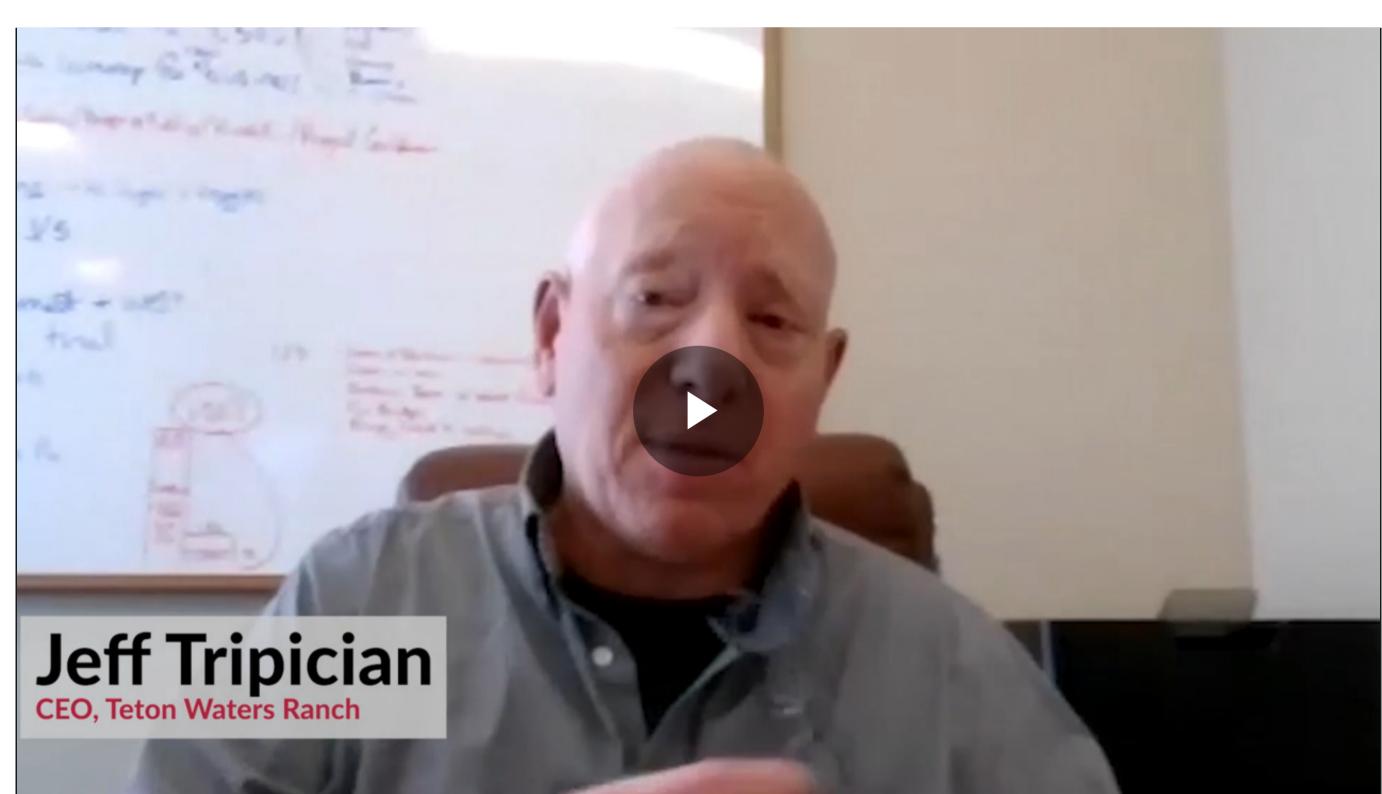
"I think the simplicity of a burger is what makes them so craveable," said Josiah Citrin, a Los Angeles-based chef whose restaurant ventures includes Augie's On Main, a fast-casual venue in Santa Monica. "At Augie's, we grind our own meat to get the perfect amount of fat-to-meat ratio so that the flavor of the meat really shines."

### **PURCHASING TRENDS**

Almost half of consumers purchase ground beef once a week at retail, and two-thirds report eating ground beef at least once a week, according to research conducted by Midan Marketing. This could partially be influenced by pressure consumers are feeling from inflation.

"Burgers are an American staple – they are on more than 50% of menus nationwide, according to Datassentials' The World of Burgers 2021 report," said Elizabeth Rice, brand manager for BUBBA burger. "However, inflation

# consumed at home.



# **FAMILY FAVORITE**

Busy families desire convenience and affordability, but also crave delicious burger flavor, Rice said. BUBBA burger's line of frozen, ready-to-cook patties includes flavors ranging from Jalapeño Cheddar and Angus Beef to Bacon Cheddar and Turkey with Sweet Onion.

"Burgers are comfort food at its finest, and they are quick and convenient to prepare," Rice said, adding that one of the biggest trends is a consumer preference for comfort foods.

Wondercheck said freshness, shelf life, color and eating experience are priorities for consumers that drive how Greater Omaha puts its ground beef blends together, using single-sourced, whole muscle cuts.

"Burger options are as deep and wide as craft beers," Wondercheck said. "Our approach is about crafting flavor profiles and menu appeal. The approach is just as much about what we don't put in the burger as much as what we do. Sometimes less is more. Primal grinds are a simple way to upgrade and create separation from commodity grinds. We're seeing increased demand for more artisanal options, like rib brisket chuck blends, as well as for classics like pure ground chuck, which offer a modest upgrade from commodity ground beef offerings marketed by lean point."

In addition to its artisan butcher blends, Greater Omaha Packing provides different options of burger density and texture to meet customers' needs. Wondercheck said Greater Omaha Packing's homestyle patty works well for open flame grills, while their puck option performs a little better on flat-top stoves and in skillets.

With meat case pricing continuing its upward trend, many shoppers will prioritize value over variety when weighing their burger purchase decision.

"We are not looking to make designer burgers that are only occasional indulgences," Wondercheck said. "Instead, we want to help our customers keep beef at the center of the plate."

When consumers purchase beef, they are seeking the right balance between value and quality, he said. Many consumers are stretching their food dollars due to inflation, yet they still desire a great eating experience.

"For retailers, we've found a growing niche in the offering of fresh convenience burgers," Wondercheck said. "We are experiencing growing demand for our retail-ready, fresh, vacuum sealed burgers. The packages are leak-proof so they can easily be taken for weekend at the lake, and the burgers are grill-ready without any additional handling. Our fresh, gourmet Hereford Chuck burgers, for example, are a win-win for busy families balancing price, quality and convenience. Pre-shaped into seven-ounce homestyle burgers, our 1.75-pound pouches can feed a small family for under \$8".

# ADDING VALUE THROUGH LABOR SAVINGS

With staffing shortages a continuing challenge for foodservice operators, pre-portioned burgers can provide a ready-for-the-grill solution requiring limited preparation.

"For retailers and foodservice operators, we help them save the time and added expense of grinding their own burgers in-house by providing chubs, which can strengthen their bottom line and provide strong food safety and product quality," Rogers said. "Convenience for our retail and foodservice partners is about getting a premium product just how they need it, so we offer chubs, bricks, pucks and patties. Whether we are servicing foodservice or retail, making sure packaging and portioning options meet the

ever" and "no added hormones."

needs of our customers is table stakes for us, and one of the keys to our continued success. **MOTIVATING MESSAGING** 

Many consumers want to know more about how their ground beef was produced, and research suggests seeing a production claim can influence consumers to purchase a product. "Claims like no antibiotics ever, no added hormones and natural are indicators of quality to many consumers," Rogers said. "We have

space." He said Creekstone's Natural Black Angus beef products can be traced to the ranch of origin and offer claims like "no antibiotics

seen huge popularity in our Natural Black Angus Beef for retail and foodservice customers, as well as in the direct-to-consumer





### FROM GRINDING TO PACKAGE.

Every Handtmann Burger Solution offers gram-accuracy and comes with a 2-year warranty.

Our technical team supports burger customers and performance dependability with responsive service, solution expertise, and our Handtmann commitment to their success.

### **Grinding & Mixing**

Handtmann grinding, mixing, and inline grinding options offer efficient solutions for burger processors of all sizes, from artisan to the highest commercial volumes.

>> SEE INOTEC IN ACTION

### **Homestyle Patties**

High speed Handtmann rotary cutters produce excellent homestyle patties at commercial volumes simply and efficiently. All-in-One cutting & forming models are also available.

>> CLICK HERE TO VIEW

#### Food Service/Industrial Patties

6-8 lane Handtmann patty formers with flattening belt and mold options automates commercial patty production with gram-perfect weights and rapid cycle times.

>> WATCH NOW

#### **Gourmet Euro Patties**

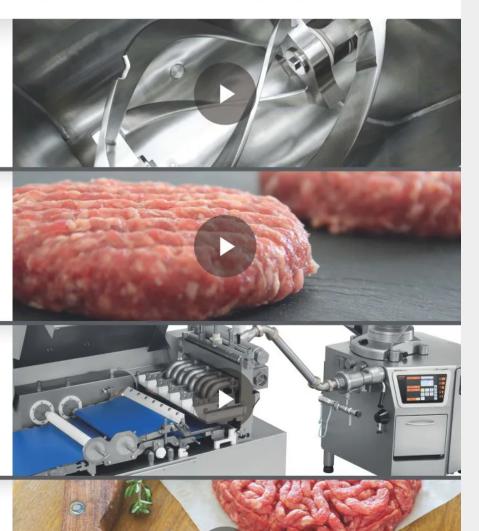
Juicy center-of-the-plate quality burger patties with loosely-formed noodles can now be produced in a wide range of diameters and product heights at commercial volumes.

>> PLAY VIDEO OF 507

#### **Handmade Patties**

The Handtmann individual patty former speeds production by providing continuous manual patty forming with exact weights for smaller volume operations.

>> SEE HOW IT WORKS











# AS THE COMPANY HAS CONTINUED TO SCALE, AMERICAN OSTRICH FARMS IS BEGINNING TO EXPAND INTO RETAIL GROCERY STORES AND INDEPENDENTLY OWNED RESTAURANTS.

BY FRED
WILKINSON
CHIEF EDITOR

The Kuna Idaho-based American Ostrich Farms' journey to becoming a nationwide supplier of value-added exotic-yet-assessable ostrich meat products began in 2012, when company founder Alex McCoy was living in South Africa and first ate ostrich while training for an Ironman triathlon event. Realizing that ostrich could satisfy consumers' red meat cravings while offering them a unique eating experience and nutritional benefits, McCoy left his career in finance, moved back to his home state of Idaho and purchased a 120-acre property on the Snake River Plain.

### **DISRUPTION AND INNOVATION**

During the first years of the COVID-19 pandemic, American Ostrich Farms faced the same challenges as other small producers. Disruptions to the meat processing industry left them unable to harvest their livestock. Responding to the need, American Ostrich Farms began construction of a USDA-inspected processing plant adjacent to its ranch, said Jessica Roth, marketing manager at American Ostrich Farms. Dubbed Sustainable Meats, the operation opened its doors in May 2022, making American Ostrich Farms a 100% vertically integrated producer of USDA-inspected meat.

Sustainable Meats not only services American Ostrich Farms but also a number of other small and family-operated ranchers. In their first year, Sustainable Meats will process more than 1,000 ostriches, 1,000 lambs and 750 head of cattle, Roth said. The operation offers USDA-certified organic and custom processing, as well as custom labeling and FSIS label submission, she said.

In collaboration with Sustainable Meats, American Ostrich Farms is conducting a feasibility study into producing value-added products, with a goal of developing ready-to-eat products that fit into consumers' busy lives while delivering nutritional value, flavor and environmental responsibility, Roth said.

# MARKETING MESSAGING AND CHANNELS

American Ostrich Farms positions itself as a leading national producer of ostrich filets, roasts, preformed burger patties, ground ostrich and more, with the majority of their products being whole muscle cuts. The "hatch-to-harvest" operation allows American Ostrich Farms to provide consistent quality, Roth said.

For getting its products to its customers, American Ostrich Farms prefers the direct approach.

"American Ostrich Farms was an early adopter of the direct-to-consumer model,"

Before Crowd Cow and Butcher Box, American Ostrich Farms shipped frozen products direct to its customers. American Ostrich Farms products are primarily sold through the company website, shipping to all 50 U.S. states.

Roth said that as the company has continued to scale, American Ostrich Farms is beginning to expand into retail grocery stores as well as a growing network of independently owned restaurants. American Ostrich Farms plans to supply multiple farmers markets

beginning in spring 2023.

Roth said there are some growth opportunities for ostrich.

"As more Americans weigh the health and environmental considerations of red meat consumption — and as the market is seeing an influx of plant-based and, eventually, lab-grown substitutes — ostrich stands alone as an extremely palatable, nutritious and sustainable alternative that looks and tastes a lot like premium grass-fed beef," she said.

Despite its categorization as an exotic protein, ostrich is remarkably approachable; easy to cook with, not at all gamey, and quite versatile, Roth said.

The meat also boasts a compelling nutritional profile.

"Ostrich meat is low in fat and cholesterol, rich in protein, iron and B vitamins, and the only red meat recommended by the American Diabetes Association," Roth said.

# SUSTAINABILITY

Roth said.

In keeping with its name, Sustainable Meats aims to redefine the relationship between meat processing and the environment, Roth said.

Pound for pound of boneless meat, ostrich production requires a third the amount of fresh water required for conventionally raised beef and 1/50th the land compared to grass-fed beef, she said. Ostrich only produces a tenth the greenhouse gas emissions.

"Ostriches have a superior feed conversion ratio, and raising them generates much less waste in terms of manure and greenhouse gas emissions," Roth said. "These remarkable birds are drought-tolerant omnivores, which allows them to thrive in regions that would otherwise require significant irrigation."

Beyond the inherent sustainability upsides of ostrich production, Roth said American Ostrich Farms minimizes waste by using every possible byproduct of their operation:

- fat is rendered and purified for use in moisturizing skin care products
- eggshells and feathers are sold for crafting and decor
- and low-volume cuts like liver and heart are made into freeze-dried pet treats.

The company sources feed, materials and other resources locally to the greatest extent possible, and their hatch-to-harvest model means that transport-related emissions incurred to produce a final CPG product are nearly nonexistent, Roth said.

"Because they have control over the process, they capture more from each animal, vastly decreasing waste," she said. "What is not used is composted and utilized to build the soil on their farm."

With little municipal infrastructure available at their location, Roth said Sustainable Meats has had to engineer its own solutions to mitigate a variety of environmental impacts, with the company aiming for a holistic set of solutions to achieve greater

environmental sustainability that can be a model for the small-scale slaughter and processing industry, Roth said.

"Wastewater generated by the plant is treated using a high-tech self-contained treatment system that results in effluent cleaner than what comes from a typical residential home," she said. "The company hopes it's holistic set of solutions to achieve greater

environmental sustainability will be a model for the small-scale slaughter and processing industry." Photos are courtesy American Ostrich Farms

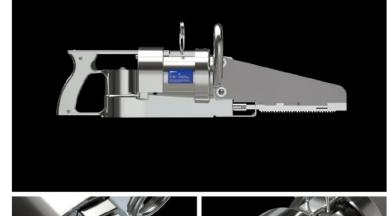


Designed, Manufactured, and Tested in Middletown, Connecticut, USA

WELLSAW 404 / 424 & 444 / 464 Reciprocating Breaking Saw

### With great power comes great versatility.

















**REGULATORY UPDATE** 





# THE WORKFORCE FACES A 15-TO 20-YEAR SHIFT IN POPULATION, WITH SIGNIFICANT LABOR SHORTAGES.

### BY DAN EMERY

Understanding the long-term demography In the U.S. labor force, we have a 15-to 20-year shift in population that is going to create significant labor shortages. We are experiencing part of this right now. We're only halfway through the bubble, with 50% of the large baby boomer generation retired. There are not enough people of working age to replace them. The next generation is in school, but they're too young to work. Unlike some other countries, the U.S. will be OK long term, but we're going to have a 15- to 20-year void in our labor supply.

Al is a solution that can be employed to eliminate some of the labor voids that we will experience over the next 15 to 20 years. Al, however, requires a long-term commitment and investment to compensate for this issue. For the U.S., our neighbors to the south are key components of balancing our labor supply as well. We need our government to grasp the reality and make some hard decisions that won't be popular with blue-collar workers.

Farmers will be in short supply. In the next 15 years 70% of the farmland in the U.S. will change hands. We need young farmers to take over the responsibility. Someone must raise the corn and soybeans that we use in our feed ingredients. Ronnie Moser from United Animal Health reminded me that those of us in animal production business, have been working for 50 years to improve feed formulations, adding enzymes, and probiotics, improving feed conversion, and reducing costs.

# ANIMAL WELFARE

Establishing good animal welfare policies, enforcing your policy and offering these to our customers to include in their policies is a great way to control the narrative versus being dictated to by special interest groups. It's economically desirable, a logical best practice, and it's the right thing to do.

Avian influenza is a serious problem, and the recent outbreak seems to be a lot different than the event in 2015. It seems to be a lot more virulent and contagious, and it travels differently. Rodent control is a critical part of solving this problem, it's also a critical part of controlling Salmonella and many other pathogens. The hot topic in America is the price of eggs. It's simple supply and demand: By the end of December 2022, more than 43 million egg-laying hens were lost to HPAI. It's going to have a significant impact on supply and demand for months to come.

# FOOD SAFETY

In August 2022, USDA announced its intention to declare *Salmonella* an adulterant in breaded and stuffed raw chicken products. Historically, *Salmonella* has not been considered an adulterant in raw poultry products because proper cooking destroys the pathogen. The planned policy change reflects a significant change in how USDA FSIS regulates pathogens in raw poultry. How this change would be implemented remains to be seen. Should USDA declare Salmonella as an adulterant it would have significant operational and financial implications for poultry producers and handlers.

In late February, National Chicken Council President Mike Brown delivered testimony at the House Agriculture Committee hearing, "Uncertainty, Inflation, Regulations: Challenges for American Agriculture," which focused on regulatory barriers and red tape holding back American agricultural production.

In his testimony to the House Ag Committee, Brown highlighted Packers and Stockyards Act rulemaking, processing line speeds and new Salmonella regulations as being burdensome for poultry producers.

"All of these regulatory programs share two things in common: One, there is no compelling justification for them, and two, they would drive unprecedented levels of food inflation and food scarcity," Brown said.

∃ TOC 
 ∃ 
 ↓



# ATTENDEES CAN GAIN A DEEPER UNDERSTANDING OF ALL ASPECTS OF MEAT AND POULTRY PRODUCTS, MARKETING AND BRANDING.

BY SAMMY BREDAR ASSOCIATE EDITOR

The 2023 Annual Meat Conference (AMC), set for March 6–8 in Dallas, is the place to be for all involved in the meat retail industry. Rick Stein, vice president, Fresh Foods, FMI – The Food Industry Association, and Julia Ann Potts, president and CEO of the North American Meat Institute (NAMI), share background and current insights for the Annual Meat Conference.

AND PERSONAL

Potts says that the AMC first began as the Meat Marketing conference. "This was jointly founded by NAMI/FMI, as both organizations recognized there was a need for our memberships to collaborate together and learn from each other on how to help drive consumer demand of meat/poultry products at retail," Potts says.

The 2023 AMC has a new look, guided by Midan Marketing, for a modern and personal AMC, Stein says.

Potts says that those in the meat retail industry should attend the conference to, among many other reasons, improve upon all aspects of meat and poultry products, including marketing, branding and sales, gain a deeper understanding of consumer needs and trends, get ahead of competitors and have enriching conversations with others in the industry.

"Our workshops will center on the theme of protein made personal," Stein says. "They will be highly interactive and provide attendees with a forum to get inspired and discover new tools and insights to make their brands and products unique and desirable to consumers."

Potts says AMC workshops serve two purposes:

- to take a deeper dive into some of the most popular topics, where it is hard to cover all the material in one setting (Market
- Update, Power of Meat and Case-ready)
  and to allow for attendees to have more time to discuss with and ask questions of presenters.

"Other workshops take a look at areas of the industry that have big impacts on meat retail, but may not be the (attendees') primary

function — regulations, social media, trends in labor, etc.," Potts says.

Aside from speakers and workshops, attendees will have many other opportunities at the conference.

"The exhibit hall will host more than 100 exhibitors showcasing an extensive array of animal protein food assortments ... and the latest innovations in technology," Stein says. "The exhibit hall opens Tuesday, March 7, from 12:30 p.m. to 5 p.m."

"The event provides attendees an array of networking opportunities during a welcoming reception, the Women in Meat Retail Networking Luncheon, and our Leaders of Tomorrow reception and dinner," Stein says.

Sustainability is likely to be a theme throughout the exhibit hall, Potts says.

"We expect to see meat packers/processors highlight the good work they are doing with supporting healthy people, healthy communities, healthy animals and a healthy planet and sharing their story with their retail partners, and ultimately, consumers," Potts says.

Stein says that this year's AMC is dedicated to reigniting the passion in the meat retail community.

"We're focused on helping the industry better articulate their brand stories, undergirded by operational and shopper insights to guide their businesses," Stein says. "We are giving special emphasis to supply chain and other disruptions, innovation and workforce aspects to the meat industry this year. Many of the education sessions will touch upon these themes."

The 2023 AMC will have more than 1,500 attendees from all across the meat retail industry, Stein says.

Stein says that every person involved in the meat retail industry should attend the AMC for three reasons.

"The event is designed to support their goals by getting a better understanding of customer and consumer needs through the 18th annual Power of Meat analysis and keynote session ... and a special session titled ... 'Realizing the Business Value of Supply Chain Transparency," Stein says. "In addition to revealing insights, the event will offer discussions on the regulatory environment."

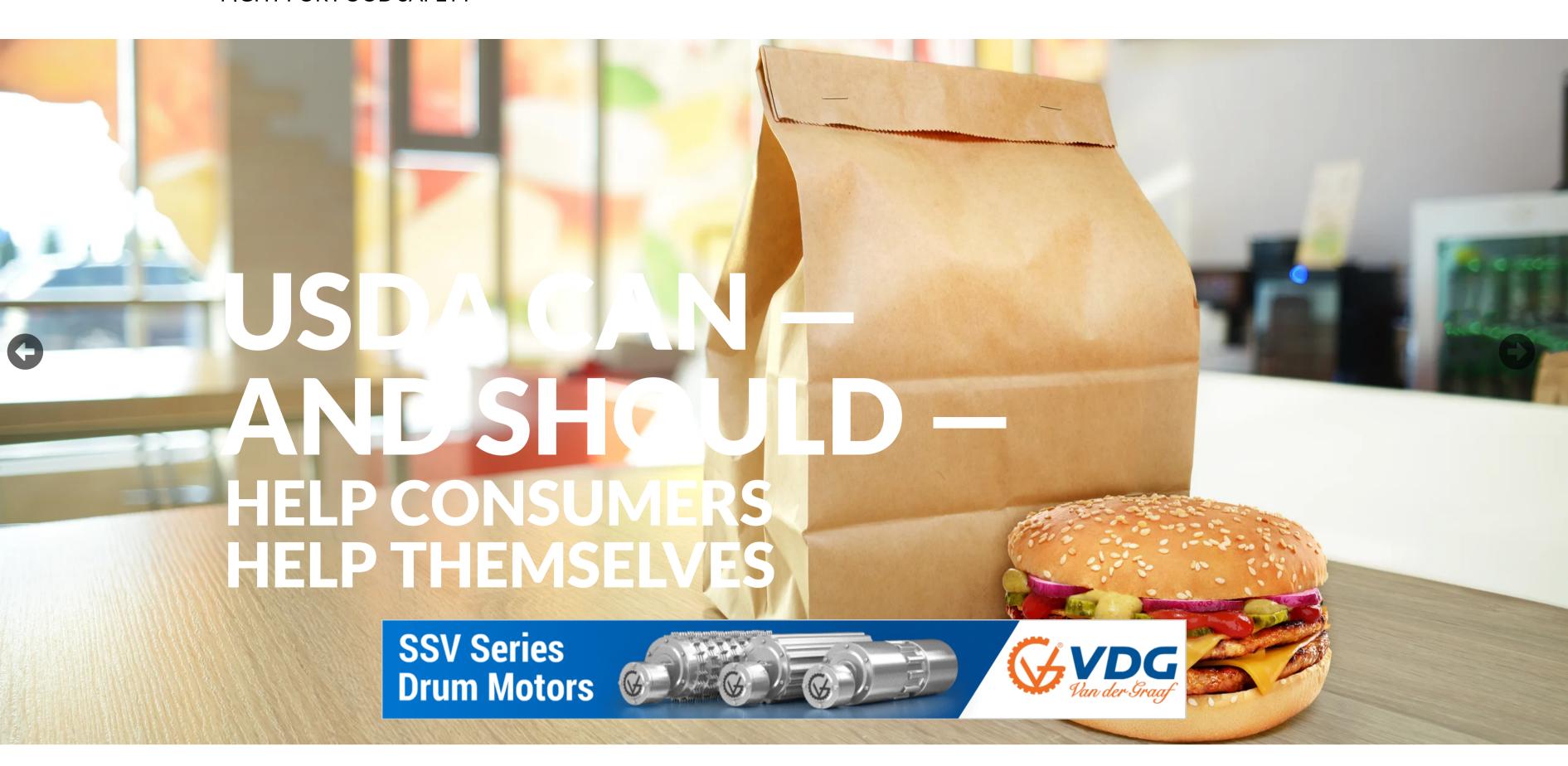
The AMC will also address industry concerns, including food inflation, automation and sustainability, Stein says. "Two particular sessions, 'Economic Trends, Global, Trade, Labor and What's Ahead' and 'Overcoming Volatility in Meat Retail: A Look Ahead' will offer attendees perspective on overcoming challenges."

Stein gives one last reason for those in the meat retail industry to attend the AMC: new products and technologies. "A 'Retail Innovation in Meat' session, in addition to nearly 100 exhibits, will surely inspire attendees," Stein says.

Event partners for the 2023 AMC include FMI – The Food Industry Association, The Foundation for Meat and Poultry Research and Education, and the North American Meat Institute (NAMI).

FIGHT FOR FOOD SAFETY





# THE AGENCY SHOULD EARMARK MORE FUNDING FOR EDUCATING CONSUMERS ABOUT SAFE FOOD HANDLING PRACTICES.

**BY SHAWN K. STEVENS**FOOD INDUSTRY COUNSEL LLC

Following the Jack-in-the-Box foodborne illness outbreak in 1993, the U.S. Department of Agriculture declared *E. coli* O157:H7 to an adulterant in raw ground beef. In the years that followed, that declaration forced food companies to make significant changes in the methods by which they dressed cattle and processed the resulting products. While *E. coli* remained elusive in raw beef products, causing dozens of foodborne illness outbreaks and hundreds of food product recalls in the ensuing decades, the overall safety of beef products continued to improve over time. Today, *E. coli* recalls involving ground beef are markedly rare – no pun intended.

Now, 30 years after Jack-in-the-Box, with industry demonstrating significant success against *E. coli*, USDA is increasingly turning its attention and resources to combating *Salmonella* in poultry products. USDA estimates that, every year, 1.35 million consumers become sick from *Salmonella* infections. USDA has also reported that, over the course of the past decade, the level of *Salmonella* illnesses has not decreased and, as a result, the agency has not met any of its stated goals for long-term reductions in *Salmonella* illnesses. The agency also recognizes that, based upon current trends, USDA will not achieve its desired target of a 25% reduction in annual *Salmonella* illnesses by 2030.

Salmonella is arguably more elusive in raw poultry products than *E. coli* is in ground beef. While USDA's desire to reduce Salmonella by passing new regulations (and now considering declaring Salmonella to be an adulterant in a growing list of products), the agency would likely have far more success toward meeting its goals if it invested more resources in educating the public on the safe handling of poultry.

DISEASE." And then inviting visitors to "Learn about How to Appropriately Handle Poultry to Keep You and Your Family Safe."

In my opinion, the agency also should devote additional (and substantial) dollars to educating consumers about proper food handling practices with a campaign of commercials and internet ads. Imagine how successful a single and clever Super Bowl ad could be at educating consumers about handling poultry and avoiding illness. Instead, it seems that consumer education is an afterthought at USDA.

We can't help consumers who don't know enough to help themselves. With more resources aimed at educating an increasingly uneducated public about safe food handling, perhaps USDA would begin to witness a more significant decline in foodborne illnesses.





# DUE TO BEEF DISCOLORATION IN THE U.S.

### STUDY SUGGESTS 2.55% OF BEEF WAS DISCARDED DUE TO DISCOLORATION.

BY RANJITH RAMANATHAN<sup>1</sup>\*, LIXIA H. LAMBERT<sup>2</sup>, MAHESH N. NAIR<sup>3</sup>, BRAD MORGAN<sup>3</sup>, RYAN FEUZ<sup>4</sup>, GRETCHEN MAFI<sup>1</sup>, MORGAN PFEIFFER<sup>1</sup>

1 DEPARTMENT OF ANIMAL AND FOOD SCIENCES, OKLAHOMA STATE UNIVERSITY, STILLWATER 2 DEPARTMENT OF AGRICULTURAL ECONOMICS, OKLAHOMA STATE UNIVERSITY, STILLWATER 3 DEPARTMENT OF ANIMAL SCIENCE, COLORADO STATE UNIVERSITY, FORT COLLINS 4 APPLIED ECONOMICS, UTAH STATE UNIVERSITY, LOGAN

This research is published in Meat and Muscle Biology journal, and the full paper can be accessed by clicking the link <a href="https://doi.org/10.22175/mmb.13218">https://doi.org/10.22175/mmb.13218</a> (Ramanathan, R., L.H. Lambert, M.N. Nair, B. Morgan, R. Feuz, et al. (2022). Economic loss, amount of beef discarded, natural resources wastage, and environmental impact due to beef discoloration. Meat Muscle Biology. 6(1): 1–8)

Beef color is an important sensory attribute that influences purchasing decisions. Consumers prefer a bright red color, and any deviation from a bright red color leads to less acceptance. Discoloration of beef results in a discounted price, or the product is discarded. Hence, quantifying economic loss and the amount of beef discarded is vital to develop strategies to minimize their losses and maximize the sustainability of cattle production.

The objective of the study was to determine economic losses and the amount of beef discarded or sold at a discount. One-year data of total beef sales, total beef discarded, and discounted sale values during 2020 were collected from two national retail chains and one regional retail chain. The two retail chains were located throughout the U.S., and the one regional retail chain was located in Southern U.S. The data collected in the study came from 5,034 stores and 44 states. The total retail sales details from the U.S. Department of Agriculture Economic Research Service database were used to estimate the economic impact and the amount of discolored beef discarded at the national level. The total beef sales from two major retail chains and one retail store for the one year was approximately 1.16 billion pounds. The total retail beef sold in the U.S. during 2020 was 19.2 billion pounds. The current study captures all geographical regions (44 states) and approximately 6.5% of total retail sales in the U.S. The authors are not aware of the impact of the pandemic on the data collected. However, based on the USDAS ERS, there was no major impact on total retail beef produced during 2019-20.



The approximate amount of beef discarded due to discoloration is 428 million lb per year in the US







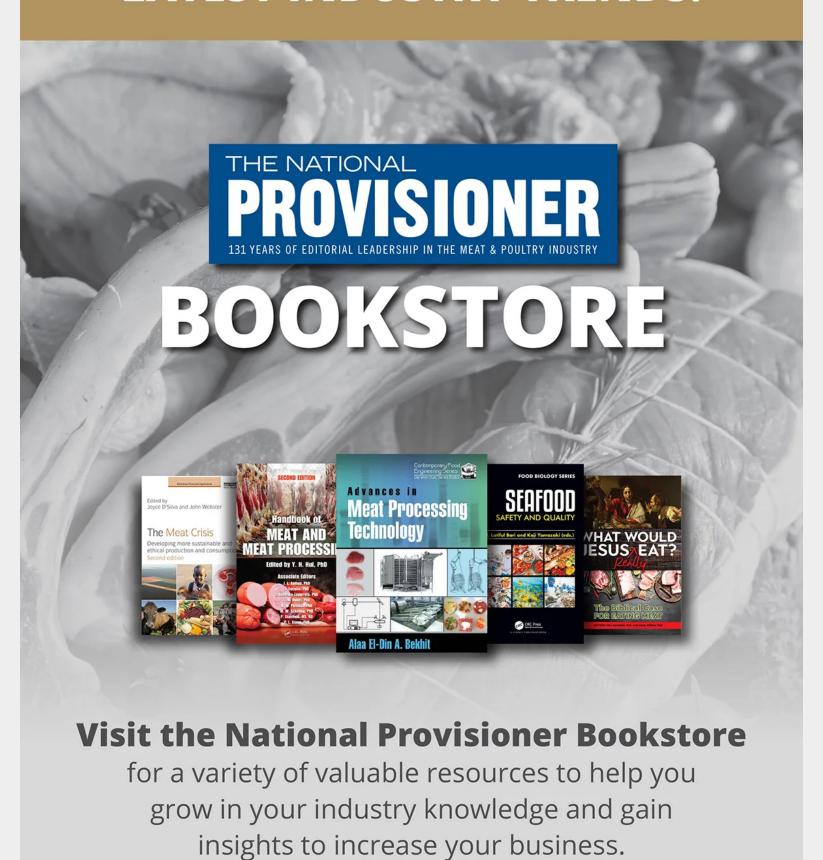
Economic loss due to discoloration annually is \$3.7. billion. The amount of beef discarded represents **780,000** animals and associated natural resources are wasted per year due to beef discoloration (assuming 550 pounds of meat from 1400 lb weight animal and 63% dressing percentage)

In the current study, 2.55% of beef was discarded due to discoloration. Beef starts out bright red, and when discoloration occurs,

Email corresponding author Ranjith Ramanathan at ranjith.ramanathan@okstate.edu.



# STAY UP TO DATE WITH THE LATEST INDUSTRY TRENDS!











# TO HELP OPTIMIZE SANITATION PROCESSES, PROTOCOLS SHOULD BE VERIFIED, DOCUMENTED AND INCLUDED IN EMPLOYEE TRAINING

Recent events, particularly the coronavirus pandemic, have heightened awareness on hygiene compliance and the need for people throughout the food supply chain to accept personal responsibility for maintaining equipment cleaning routines and sanitation protocols. Contaminant detection and checkweighing specialist Fortress Technology outlines some simple ways to create a culture that embraces food safety from start-to-end on food processing lines and the role that hygiene habits, equipment innovation and leadership support play.

Adhering to best hygiene practices is the single thing that food plants cannot cut corners on. Across North America, standards are typically very high. However, the pressure since the global pandemic has changed the landscape for a number of food processors, with localized labor challenges and supply chain disruptions further complicating mandatory audits.

The pandemic reinforced the importance of food processors conveying confidence and having robust and proactive HACCP, GFSI/SQF, BRC and hygiene protocols in place. The challenge now is making sure that these remain aligned to evolving colleague and consumer health, safety and wellbeing expectations.

Although price remains king when it comes to food purchasing drivers, safety has emerged as an equally critical consideration. A Deloitte report – The Future of Fresh – cites food safety as having multiple dimensions. Including listing safety for self, others, and the workers who produce food, as well as safety in terms of packaging, to prevent contamination.

# HABIT FORMING

It's human nature. People like things to be streamlined, efficient, faster and better. Yet, taking hasty shortcuts, particularly with hygiene and consumer food safety is a risky strategy. Being careless with compliance can become a catalyst for more shortcuts. It's not a cycle any food business would or should encourage.

Despite high levels of automation, food processing plants continue to have numerous manual touchpoints – with cleaning of manufacturing and inspection processing machinery being one.

Routine risk assessments and audits help to control the introduction of foreign material into products. External eyes provide a different perspective. Many internationally recognized audits follow set standards and provide a complete 360-degree review. A number of these information gathering audits remain hybrid, blending in-person and virtual observations. Digital evidence of all actions, from maintenance and testing of machinery to documenting hygiene checks is integral to the success of these hybrid certification models. It requires a shift in culture, where everyone up and down the hierarchy is encouraged to be a hygiene-

For in-process contaminant inspection equipment, look for smooth, crevice-free contact surfaces on conveyor, pipeline and gravity systems. This is partly to ensure that no traces of product, allergens or bacteria are left, but also to reduce the risk of cleaning agents not being fully rinsed away.

Product residues, including allergens, can be especially troublesome in pipeline systems processing liquids, semi-liquids and slurries. Special attention should be paid to the speed that reject units can be removed, cleaned and reassembled. Ideally, this will be easy to roll out, dismantle and clean working parts before securely reattaching to pumps.

Food processors might also consider the advantage of being able to maneuver machines around the plant. If a machine isn't fixed to ceilings or frame it is inherently easier and quicker to deep clean. From a flexibility perspective, it also enables easy reconfiguration on upstream processing lines. With all moveable machinery, do check to see if they are balanced systems, as this mitigates the risk of the machine tipping over when being relocated. For facilities with sloped floors, adjustable casters enable easy correction of pipe angles.

Ergonomic features can also enhance workforce safety. For example, an extension pipe on the reject output helps to prevent injury during sanitation and maintenance, and electric-powered height adjustment controls can mitigate back injuries.

Listening to different perspectives and mapping out hygiene protocols collaboratively rather than reverting to hierarchies is the best way forward to create a safe food processing ecosystem.

Ultimately, good housekeeping is common sense. Most food processors are strong custodians of hygiene and safety practices. However, given the numerous critical control points in a manufacturing plant, Fortress would always advise routinely and systematically revisiting potential hygiene hazards as part of a regular risk assessment and food safety program.



**Solutions** for **TODAY**, **Planning** for **TOMORROW** 

# MAY 8-11 2023

Donald E. Stephens Convention Center ROSEMONT, IL

OF CONSUMERS, TEAM MEMBERS, AND THE ENVIRONMENT

WEDNESDAY, MAY 10 | 9:15 AM - 10:30 AM

#### PRESENTERS:



Michael Eckhardt

Senior Vice President, Chief Legal and Risk Officer and Secretary for Wawa



#### **David McDonald**

President OSI Group





Randall Huffman, Ph.D.

Chief Food Safety and Sustainability Officer, Maple Leaf Foods



Lone Jespersen, Ph.D.

Principal and Founder, Cultivate SA

The keynote session will focus on a conversation with modern, forward-thinking executives on the topic of balancing risks for the safety of consumers, team members, and the environment. Participants will hear how successful food companies manage risks that sometimes compete for investments and leadership attention. Learning how to partner with your colleagues from human safety, sustainability, and animal welfare is a must

for you and your company to improve food safety performance and deepen your company's food safety culture. The executives will also share specific challenges and wins from their respective organizations, along with the cultural solutions that help them successfully manage risk.

> FULL AGENDA NOW AVAILABLE www.FoodSafetySummit.com

















PROVISIONER FOODS SFWB











# AD INDEX



FRAMARX		WWW.FRAMARX.COM		>> CLICK HERE TO SEE AD	
HANDTMANN	WW\	w.handtmann.link/bnp_	BURGER	>> CLICK HERE TO SEE AD	
HEAT & CONTROL	\	www.heatandcontrol.g	COM	>> CLICK HERE TO SEE AD	
JARVIS PRODUCTS		WWW.JARVISPRODUCTS.C	OM	>>> CLICK HERE TO SEE AD >>> CLICK HERE TO SEE AD	
LUBRIPLATE		www.lubriplate.com	1	>> CLICK HERE TO SEE AD	
NELSON JAMESON		WWW.NELSONJAMESON.C	OM	>> CLICK HERE TO SEE AD	
OSSID	SSV Series Orum Motors			HERE TO SEE AD	
PROSUR		www.prosur.es		>> CLICK HERE TO SEE AD	
VAN DER GRAAF		www.vandergraaf.com	/NP	>> CLICK HERE TO SEE AD	
WEST LIBERTY		www.wlfoods.com		>> CLICK HERE TO SEE AD	



## **CONTENT YOU NEED**

OUR ENEWSLETTERS BRING YOU THE LATEST NEWS,
ANALYSIS, CONSUMER TRENDS, FOOD SAFETY UPDATES,
AND PROCESSOR INNOVATIONS; AS WELL AS NEWS AND
INNOVATIONS FROM THE SMALL AND MID-SIZED MEAT &
POULTRY MARKET. YOU WILL ALSO RECEIVE 'BREAKING
NEWS' EDITIONS THAT WILL PROVIDE YOU NEWS THAT
MATTERS MOST TO YOUR BUSINESS





# **EASY ACCESS**

DELIVERED RIGHT TO YOUR INBOX EVERY WEEK AND ACCESSIBLE INFORMATION ON THE GO SO YOU NEVER MISS A THING.

SIGN UP FOR OUR FREE ENEWSLETTERS TODAY.

PROVISIONER PROCESSOR

SIGN ME UP!







### **CLASSIFIEDS**

## **CLASSIFIED ADS**

#### **CLICK BOXES BELOW TO LEARN MORE**

### **FOOD SAFETY**



#### **EDUCATION AND TRAINING**









### **EDITORIAL BOARD**

Phil Bass | University of Idaho

**Tim Biela** | Industry Consultant

**Doug Britton** | Georgia Tech Research Institute

Joe Cordray | Iowa State University

H. Russell Cross | Texas A&M University

**Dan Emery** | GreenStar Cooperatives

John E. Johnson | Epsilon Industries

**Leigh Ann Johnston** | Tyson Foods

**Lynn Knipe** | Ohio State Universtiy

**Drew Lorenz** | We R Food Safety

**Phillip Slater** | www.SparePartsKnowHow.com

**Suzanne Strassburger** | Strassburger Meats

Steve Valesko | Butterball LLC

**Kurt Vogel** | University of Wisconsin - River Falls

Chris Young | AAMP













### PUBLISHING/EDITORIAL STAFF

### **EDITORIAL**

**Douglas J. Peckenpaugh** | Group Publisher peckenpaughd@bnpmedia.com | (847) 770- 5916

Fred Wilkinson | Managing Editor wilkinsonf@bnpmedia.com | (251) 677-2980

Samantha Bredar | Associate Editor bredars@bnpmedia.com | (770) 330-8184

**Bethany Vonseggern** | Audience Development vonseggernb@bnpmedia.com

Cory Emery | Art Director emeryc@bnpmedia.com

**Jennifer Allen** | Advertising/Production Manager allenj@bnpmedia.com | (248) 833-7347

## **CORPORATE**

**Panel and Research Director** | Ariane Claire

Chief HR & Infrastructure Officer | Rita M. Foumia

**Chief** SSV Series **Drum Motors** 



Chief Creative Officer | Michael T. Powell

Chief Operating Officer | Nikki Smith

**Chief Event Officer** | Scott Wolters

### **SALES**

**Chris Ward** | Account Manager AL, CT, DE, FL, GA, KS, MD, ME, NC, NJ, NY, PA, RI, SC, VA, VT, Puerto Rico cbwmedia.llc@bnpmedia.com | (678) 361-7815

Wayne Wiggins | Account Manager AK, AZ, AR, CA, CO, HI, ID, IL, IN, IA, KS, MI, MN, MO, MT, NE, NV, NM, ND, OH, OK, OR, SD, UT, WA, WI, WY wwiggins@wigginscompany.com | (415) 377-6130

Pam Mazurk | Account Manager International outside of Mexico and Latin America mazurkp@bnpmedia.com 001-847-247-0018 (O) | 001-847-226-6729 (M)

## **EVENT & WEB MARKETING**

Nikki Smith | Online Development Director





### SOURCEBOOK PREMIUM SPONSORSHIPS

## SOURCEBOOK PREMIUM SPONSORSHIPS

Below are premium listings from our Sourcebook. For the complete list of companies and products, go to:

www.provisioneronline.com/sourcebook







