

Steve Smith, operations supervisor, O'Brien & Gere, and Jason Shell, operations manager, Keystone Foods

# **PLUS**

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The magazine for the integrated poultry industry

#### **FEATURES**

#### POULTRY'S CRYSTAL BALL Genetics plays large role in poultry industry's future

Genetics and selection for robustness are the keys for the poultry industry in the next five years, with nutrition, veterinary care and management playing supporting roles.

BY C.Z. ALVARADO

#### PROCESSED POULTRY PRODUCTS Keeping poultry labels clean with new ingredients

Consumer preferences for clean labels and natural ingredients in poultry can be addressed through the use of phosphate replacers and antioxidants. BY CASEY OWENS

#### INTERNATIONAL PERSPECTIVE India's broiler industry moving from live to processed chicken

Manually processed poultry accounts for more than 90% of demand but modernization is spreading. BY MRIGEN DUTTA

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#### Blog on WATTAgNet



**Blog: Sanderson Farms broiler** growers to receive pay rate increase

Contract broiler growers for Sanderson Farms are to receive an increase in their payment rate as the company implements a production cut that will remain in place indefinitely. www.WATTAgNet.com/25752.html

### **WATTAgNet Exclusives**

#### **Poultry panel presentation from National Chicken Council conference available**

At the National Chicken Council 57th Annual Conference October 5, in Washington, D.C., a panel of senior executives from U.S. chicken processing companies Keystone Foods, GNP Company, Koch Foods and Perdue Farms addressed current agricultural, legislative, regulatory, economic and world trade issues.

This valuable presentation is available as a series of videos at www.WATTAgNet.com/25988.html. Simply login or signup as a user on www.WATTAgNet.com to access the presentation.

This presentation is sponsored by: Pfizer Animal Health Global Poultry



#### Video: Private labeling of chicken continues growth

Chicken marketers are packaging more often under private labels, according to a report at the Chicken Marketing Seminar sponsored by the National Chicken Council and the National Poultry and Food Distributors Association.

www.WATTAgNet.com/24810.html

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#### CORPORATE HEADQUARTERS

303 N Main St Ste 500, Rockford, Illinois 61101-1018 Tel: +1 815 966 5574, Fax +1 815 968 0941

International Publisher: Greg Watt, gwatt@wattnet.net North American Publisher: Steve Akins, sakins@wattnet.net Director of Content: Bruce Plantz, bplantz@wattnet.net

#### **EDITORIAL TEAM**

Content Director - Agribusiness: Gary Thornton, 

Poultry Confidence Index: Greg Rennier, Ph.D. Poultry Perspective: Paul Aho, Ph.D

Research Digest: Sacit Bilgili, Ph.D, Paul Dawson, Ph.D, Casey Owens, Ph.D, Scott Russell, Ph.D

#### **COPY DESK TEAM**

Managing Content Editor: Tara Leitner

Community Manager/SEO Editor: Kathleen McLaughlin

Associate Editor: Lindsay Beaton Associate Editor: Kayla Kling Associate Editor: Andrea Saladino

#### ART/PRODUCTION TEAM

Senior Art Director: Tess Stukenberg Production Manager: Jim Riedl jriedl@wattnet.net +1 815 966 5426 Advertising Production Coordinator: Connie Miller

#### SALES TEAM

#### USA/CANADA

Regional Manager: Pam Ballard, Midwest, West, Canada pballard@wattnet.net Tel: +1 815 966 5576

Regional Manager: Mary Harris, East, Southeast mharris@wattnet.net Tel: +1 847 387 3167

Classified Sales Manager: Ginny Stadel, gstadel@wattnet.net Tel: +1 815 966 5591

#### EUROPE, ASIA, AFRICA

Frans Willem van Beemen

beemenfw@xs4all.nl Tel: +31-344-653442

Michael van den Dries

driesmvd@xs4all.nl Tel: +31-79-3230782

LATIN AMERICA, CLASSIFIED SALES AND DIGITAL PRODUCTS

#### Tineke van Spanje

tvanspanje@wattnet.net Tel: +31-495-526155

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POSTMASTER: Please send change of address to KMPS, 15301 Highway 55, Suite #3A, Plymouth, MN 55447 Periodicals postage paid at Rockford, IL, USA and additional post offices. Canada Post International Publication Mail Product 0485780.











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#### POULTRY EXECUTIVE PANEL

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The audio and photos from this valuable presentation are available as a series of videos at www.WATTAgNet. com/25988.html. Simply login or sign up as a user on www.WATTAgNet.

com to access the videos and catch all that happened at the industry panel discussion.

The presentation is sponsored by Pfizer Animal Health Global Poultry.

Don Jackson, president and CEO, JBS USA, moderated the discussion and panelists included:

- ✓ William Andersen, senior vice president, Keystone Foods
- ✓ Mike Helgeson, CEO, GNP Company
- ✓ Mark Kaminsky, COO and CFO, Koch Foods
- ✓Clint Rivers, senior vice president, operations, Perdue Farms

#### USDA REPORT

# US broiler production to drop remainder of 2011



Broilers slaughtered in the second half of 2011 are expected to decrease, offsetting higher average weights at slaughter.

In the first half of 2011, U.S. broiler meat production was 18.8 billion pounds, 4.8% higher than the same time in 2010, but this year-over-year growth in broiler meat production is expected to halt in the third-quarter due to an oversupply brought on by low demand.

According to the U.S. Department of Agriculture's latest report, third-quarter production is estimated at 9.4 billion pounds, 1.3% lower than in third-quarter 2010. Lower production is expected to continue in the fourth quarter, with production in the second half of 2011 expected to total 18.6 billion pounds, a decrease of 2% from the same period in 2010.

Over the first half of 2011, the number of broilers slaughtered was 4.3 billion, an increase of 2% from 2010 numbers. The other factor in broiler meat production growth during the first half of 2011 has been higher average live weights at slaughter: During the first six months of 2011, the average live weight at slaughter was 5.79 pounds, up 2.4% from the first half of 2010. In the second half of 2011, the number of broilers slaughtered is expected to be down significantly, though average bird weights at slaughter are expected



to remain well above 2010 numbers.

Strong increases in production and a weak domestic economy have led to an increase in broiler meat stocks. Cold storage holdings at the end of the second quarter totaled 710 million pounds, 12% higher than 2010. Breast meat in cold storage was estimated at 155 million pounds, 47% higher than 2010. Stock changes for leg meat products were mixed, with holdings of drumsticks and leg quarters up 39% and 14%. Partially offsetting these increases were declines in the cold storage holdings for legs, thighs and thigh meat. The estimate for third-quarter ending stocks was raised to 685 million pounds and the estimate for fourth-quarter ending stocks was increased to 700 million pounds.

#### **POULTRY LAB**

## Georgia poultry producers plan new laboratory

Georgia poultry producers are making plans to begin construction on a new, \$11.2 million laboratory that will replace the current 50 year-old facility.

The design of the new facility will be larger than the old, and will take into consideration the flow of samples to avoid cross-contamination as well as the laboratory's function of export certification. "We need a lab that's going to be able to handle the expanded volume, the even more complex diagnostic requirements, and we need a lab that will also continue to be a vital part of our biosecurity," said Georgia Governor Nathan Deal.

The lab will also take visitors into account, providing viewing mezzanines and platforms for people to watch testing going on, instead of visitors being in the testing areas.

#### **GOVERNMENT PURCHASE**

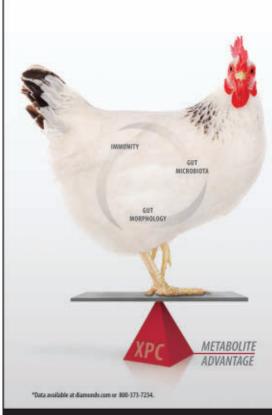
#### USDA purchases extra chicken for federal programs

The U.S. Department of Agriculture will purchase an extra \$40 million in chicken products in addition to the \$100 million in

scheduled chicken purchases it makes each year for various federal nutrition assistance programs, including donations to food banks

The purchase will provide support to the broiler industry and to small poultry growers, according to Agriculture Secretary Tom Vilsack. Broiler producers have had to cut production due to recent low demand in the market, and the USDA's extra purchase will help bring supply back in line, said Vilsack.

"At a time when the industry is under great stress due to the high cost of feed ingredients and the general economic slowdown, we appreciate the USDA's willingness to step forward and acquire additional chicken for various feeding programs," said National Chicken Council President Mike Brown. "Thanks to prevailing price trends, the government is getting a bargain on high-quality food to help meet the nutritional needs of the clients of these programs, while the industry is getting some relief from excessive inventories."



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# Poultry's Perch BY PAUL BREDWELL

# FDA used un-validated science in removal of poultry anticoccidial

ince its beginning in the 1950s, the poultry industry has relied on science and technology to enhance its ability to produce a safe, economical and wholesome source of protein for the world's population. One tool that has made this goal possible is the inclusion of arsenicals in poultry diets. For more than sixty years, arsenicals have been used to control the parasitic coccidia, especially *Eimeria tenella*, to enhance the health of the chicken's intestinal tract.

Although the benefits realized from the use of this product are numerous, the Food and Drug Administration apparently requested the drug's manufacturer, Alpharma, a subsidiary of Pfizer, to withdraw it from the market after completing a study that assessed arsenic levels in birds fed Roxarsone. While research is the mainstay of the poultry industry's efficacy, the research performed by the

100 birds, about half of which were fed rations with Roxarsone. Although the study showed varying levels of arsenic in the liver, FDA reported that "total arsenic

Coccidiosis: Management of the most frequently diagnosed disease in poultry www.WATTAqNet.com/3248.html

analysis for both liver and muscle indicated the mean of measured levels were below the established tolerance values of 2,000 ppb and 500 ppb."

To be more precise, the level of total arsenic in tissue was an order of magnitude below the allowable tolerances. In addition, the study involved newly developed analytical techniques, included extremely long sample freezer storage periods, and utilized a feed

more disconcerting is the manner in which the decision was reached. After six decades of us-

> age by billions of chickens with no evidence of

any adverse health effect, a nonpeer reviewed study of 100 chickens has resulted in the almost

immediate loss of a valuable tool in maintaining poultry health. Just as FDA never would consider basing a product approval decision on a study with parameters like those listed above, such a study should not have formed the basis for the agency to urge suspension of sales of this product.

Reflection on the actions by FDA should be sobering for anyone interested

in maintaining U.S. agricultural competitiveness and for our ability to produce safe, healthy, affordable food products for the world. While the poultry industry would support the removal of Roxarsone from the market should a complete and accurate pool of research warrant

that decision, the current body of data collected from this research project does not meet that benchmark.

Reflection on the actions by FDA should be sobering for anyone interested in maintaining U.S. agricultural competitiveness and for our ability to produce safe, healthy, affordable food products for the world

FDA's rushed judgment concerning the use of Roxarsone in poultry feed diets.

## Questionable rationale and research

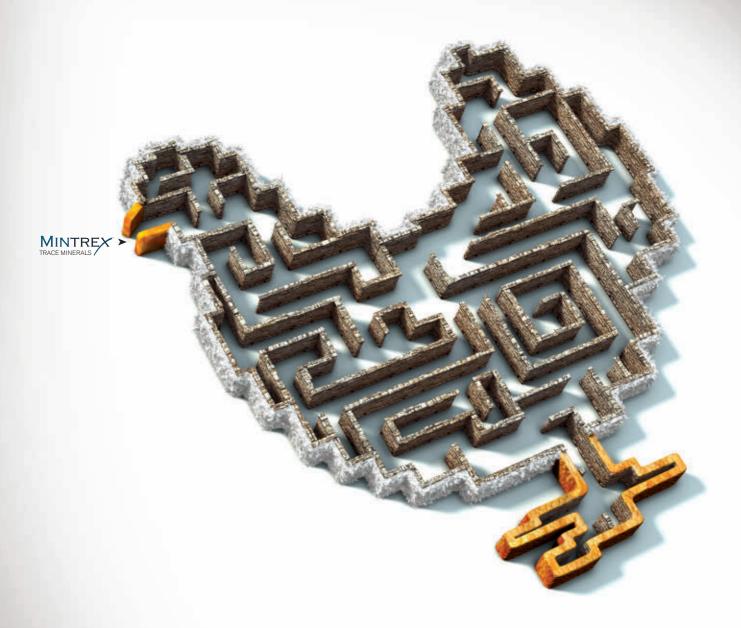
FDA's rationale for requesting suspension of the sale of Roxarsone was based on an FDA in-house study performed on

formulation atypical of commercial poultry feed, all issues that would likely be pointed out had the study gone through a proper peer review process.

# Different standard than for approvals

Beyond the concerns over the technical issues regarding the study, what is

Paul J. Bredwell, III, P.E., is vice president environmental programs, U.S. Poultry & Egg Association, phone +1.770.493.9401, email pbredwell@poultryegg.org.



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## **>>>**PoultryConfidenceIndex

BY GREG RENNIER, PHD

# Poultry industry confidence stabilizes on news of supply cuts

he U.S. poultry industry started the year 2011 in a bad state; pessimism in the industry was at its highest levels. Grain prices were high, fuel costs were rapidly rising and excessive supply was dampening prices. All in all, there were few or no positives. Although many of these negatives extended into the second quarter, confidence improved as the industry adapted (as it always seems to do). Now in the third quarter of 2011, confidence has stabilized and outlooks for future profits are bright.

The WATT Poultry USA/Rennier Associates Poultry Confidence Index remained steady in the third quarter of 2011. The Overall Index now stands at 79.0 (1996 = 100), down slightly from 84.4 the previous quarter. The Present Situation Index dropped back to 74.2 from 91.1 (a one-quarter blip?). Finally, the Expectations Index rose slightly to 82.1 from 79.7.

#### 'Present situation' still weak

Opportunities – more precisely, the lack of new jobs and unemployment – were the primary drivers behind the fall in the Present Situation Index. These issues have received a lot of press lately. As stated in the June edition of the Consumer Confidence Index, "Consumers' appraisal of current business and employment conditions was less favorable as concerns about the labor market continue to weigh on consumers' attitudes."

The poultry industry is experiencing similar apprehensions. As one PCI respondent summarized, "Even though opportunities may be available, the company is reluctant to replace or add to the head count due to the current economic conditions."

On the positive side, profits expectations rose substantially, from 64.4 last quarter to 89.6

this quarter, continuing a steady climb since the first quarter. This is surprising given the numerous comments received about the high cost of grains – "Input costs are very high due to grains" and "Grain prices will continue to erode." And there were predictions of a long and sustained recession ahead – "A clear-cut recession is looming" and "The economy is headed for a deep recession."

#### **Profit expectations**

So what's driving profit expectations given unrelenting grain prices? Especially when respondents said things like the following: "It can't go any lower" or "It can't get any worse." Like many times before in many different commodity markets, when profits go down, producers will cut back to align supply with demand. This has started to occur.

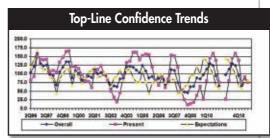
In addition to confirmatory comments like, "I believe the industry has taken real steps to limit supply," recent data points to a 6.6% decline in weekly egg sets. This figure has accelerated in recent weeks, a positive sign that the industry is moving in the right direction. However, according to BB&T Capital Markets analyst Heather Jones, reductions in the range of 8% to 9% are required to return the industry to profitability.

#### Summary

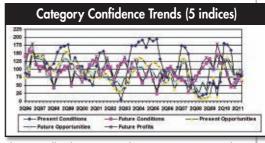
After hitting rock bottom in the first quarter of 2011, confidence in the U.S. poultry industry rebounded in the second quarter and remained steady in the third quarter. Even though grain prices remain a thorn in the side of the industry, news of production cuts is cause for celebration. Expectations for higher profits are on the rise.



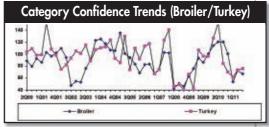
Greg Rennier, Ph.D., is president of Rennier Associates, Inc., email greg@rennierassociates.



All the confidence measures dropped except for the outlook for future profits, which rose from 64.4 to 89.6.



The Overall Index now stands at 79 (1996=100), down from 84.4 last quarter.



Confidence fell in the broiler sector but rose marginally in the turkey sector.



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# Poultry Perspective BY PAUL AHO BY PAUL AHO

# The effects of recession and high grain costs

etween 2007 and 2012, U.S. per capita poultry and red meat consumption fell 17 pounds. As would be expected, the bulk of decline was in the more expensive, less feed-efficient red meats, where consumption dropped by 15 pounds per capita.

However, the effects of high grain costs and recession were so great that even poultry consumption dropped by 2 pounds over the same period. To find a decline of similar magnitude you have to go back to the early 1970s with the oil embargo, recession and grain crisis.

After declines of such magnitude, a rebound can be expected. Sooner or later, grain prices will fall and economic recession will give way to a better climate for meat production and consumption.

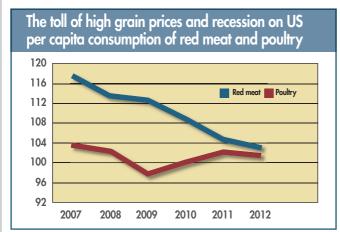
#### Prospects for lower grain prices

Although grain prices will never return to the levels of five years ago, the current corn price of \$7 per bushel is unsustainable. Corn will eventually fall because at current levels demand is suppressed (lower chicken, beef and pork production, and less ethanol), while production is stimulated.

The only thing holding back a fall in corn prices is a predicted poor harvest in the U.S. for a second year in a row. By crop year 2012-13, corn prices should finally fall to \$5 per bushel on average over the entire year. After the last few years, \$5 per bushel will seem like a miracle.

#### Prospects for a better economy

Though the U.S. economy has made significant progress since 2009, there has been recent concern about the possibility of a double-dip recession just a few years after the last. Economists' consensus opinion is that growth will be disappointing in 2011 and 2012, but there will be



High grain costs and recession helped drive down poultry consumption by 2 pounds in the 2007-12 period.

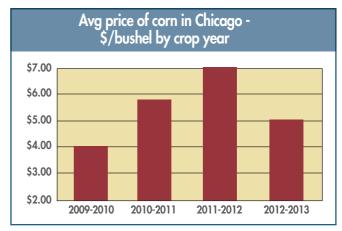
no second recession.

Fixing the financial system problems of 2008 is taking longer than expected and new problems with sovereign debt have emerged in Europe. But, U.S. growth should slowly pick up in 2012 and 2013.

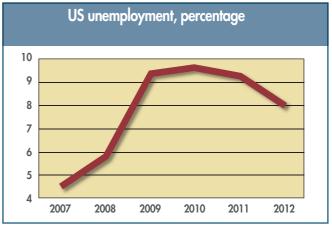
A bellwether statistic to watch is unemployment, while unusually slow to drop in this current weak recovery, it will likely head in the right direction in 2012.



Paul Aho, Ph.D., Poultry Perspective, phone +1.860.429.3053 or email paulaho@paulaho.com



By crop year 2012-13, the price of corn should fall to \$5 per bushel as an average.



Unemployment will in all likelihood begin to head in the right direction in 2012



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# **ENVIRONMENTAL** SUSTAINABILITY

# Keystone Foods keeps small environmental footprint in further processing

Managing environmental risk is a core competency at Keystone Foods and the reason behind its winning the 2011 Clean Water Award in wastewater pretreatment.

BY GARY THORNTON

Keystone Foods boasts that no food supplier is better positioned to protect the world's leading consumer brands. Its poultry further processing facility in Gadsden, Ala., is an example of how the company does just that by employing socially responsible business practices, avoiding risk and keeping costs low.

The state-of-the-art, 200,000-square-foot further processing facility has three fully-independent lines capable of producing cooked products at a rate of 13,000 pounds per hour in a variety of forms, including diced, sliced and formed poultry. Processing lines are equipped with the newest technology in cooking, chilling, freezing and packaging.

See an interview with David Toddes, Keystone Foods, at www.WATTAgNet.com/21076.html





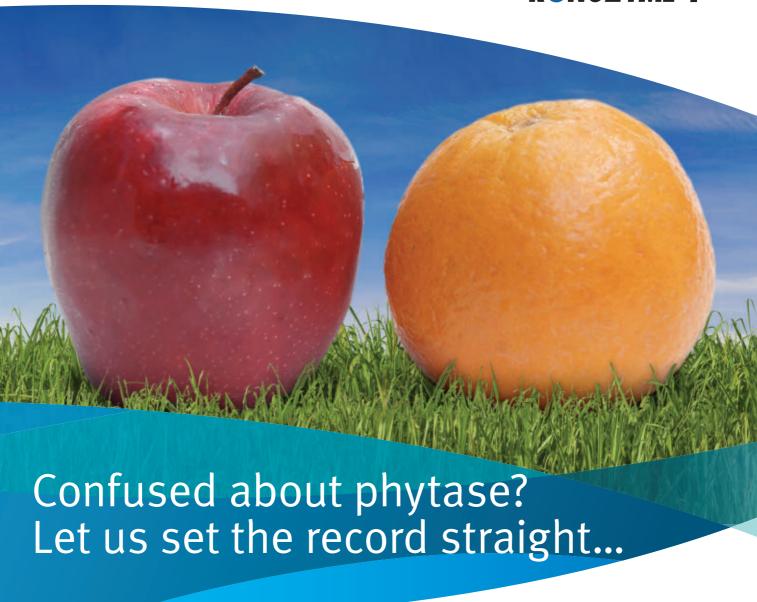
From left: Steve Smith, operations supervisor, O'Brien & Gere, and David Toddes, director of environmental programs, Keystone Foods

Every facet of operation at the Gadsden facility, from further processing and cold storage to wastewater management, is designed to manage risk in cost, food safety and environmental compliance.

Keystone Foods, Gadsden, wastewater treatment performance, 2010												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flow, mgd	0.34	0.264	0.261	0.273	0.333	0.356	0.366	0.365	0.318	0.337	0.305	0.271
pH, S.U.	6.58	6.74	<i>7</i> .16	7	<i>7</i> .16	7.36	7.41	<i>7</i> .41	7.58	7.5	7.36	7.38
BOD5, ppd	31.5	50. <i>7</i>	5.3	6.2	6.8	3.1 <i>7</i>	11.8	8.1	10.6	3.54	3.45	7.43
TSS, ppd	130.4	54.5	35.3	28.4	41.5	28.8	91.3	205	142.5	60.07	44.04	38.5
O&G, mg/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
TKN, mg/L	17.4	6.18	5.39	6.93	6.03	7.86	5.74	7.68	4.89	5.24	4.75	4.43
NH3, mg/L	11.5	1.39	0.125	1.59	1.56	1.47	0.331	0.339	0.165	0.123	< 0.100	< 0.100
mgd = million gallons per day; ppd = pounds per day												

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To learn more about how to evaluate phytase, go to www.phytasefacts.com, or call 1 800 526 0189.



#### >> ENVIRONMENTAL SUSTAINABILITY



Two stages of dissolved air flotation treatment are employed. Wastewater flows from the primary DAF unit (background) into the aeration basins and back through the secondary DAF unit (foreground).

Consider the following examples:

- ✓ The further processing plant has a line control and manufacturing execution system to increase quality and performance.
- ✓ Cameras positioned throughout the plant record every process as a part of quality control and food safety security.
- ✓ Dedicated cold storage is professionally managed by an independent vendor, Southern Cold Storage, in a 71,000-squarefoot, on-campus facility.
- ✓ The plant's high-performance wastewater treatment system is managed by the professional engineering firm, O'Brien & Gere, providing operational focus and accountability. Offsite engineers are able to remotely monitor and control the treatment processes through the supervisory control and data acquisition system when

system operators in Gadsden require technical assistance.

#### 2011 Clean Water Award

Keystone's commitment to managing risk is nowhere better demonstrated than in its environmental programs and facilities. Keeping costs low while meeting stringent environmental standards earned Keystone Foods in Gadsden, Ala., the U.S. Poultry & Egg Association's 2011 Clean Water Award in the pretreatment category.

When the judges for the 2011 Clean Water Awards initially reviewed the wastewater pretreatment data for the Gadsden facility, their first reaction was that there was some mistake in the data because the effluent parameters for biological oxygen demand and total suspended solids were so far below the permit limits.

#### **Treatment performance**

Here's what so favorably impressed the CWA judges about the effluent data: Biological oxygen demand, or BOD<sub>5</sub>, averaged 12.4 pounds versus the permit limit of 917 pounds. Total suspended solids, or TSS, averaged 75 pounds versus the permit limit of 917 pounds. Oil and grease levels were usually below detectable limits. Nitrogen as measured by total Kjehldahl nitrogen,

or TKN, averaged 6.88 milligrams per liter versus the permit limit of 30 milligrams per liter.

#### Designed for 100% compliance

David Toddes, director of environmental programs, Keystone Foods, explained why the performance of the plant's environmental systems is so important to the company. "Customers for the products produced at this plant view the environmental capabilities as part of their total risk package. That's why the design of the environmental systems was



The aeration process features two separate wastewater flow trains (left and right) for flexibility and cross-mixing between anoxic and anaerobic zones (foreground and background) through the use of mixers stationed at port holes in each of the basin's internal walls.

a very deliberative process to make sure the facility would be 100% compliant with all regulatory permits 100% of the time."

#### Cost effective

Smart wastewater treatment process

design helps the plant deliver highly efficient wastewater treatment without substantial increases in investment. "I would say that you couldn't build a more cost-effective plant than this one," Toddes said. A unique feature in the facility's design is the biological process that consists of two 135,000-gallon concrete aerobic basins. Each basin is

Keystone Foods, Gadsden, wastewater permit limits								
	Unit	Daily Min.	Daily max.	Monthly avg.	Frequency	Sample type		
Flow	mgd		0.53	0.44	Daily	Totalized		
рН	S.U.	5	9.5		Daily	Grab		
BOD, 5-day	ppd		Monitor	91 <i>7</i>	3/week	Composite		
TSS	ppd		Monitor	91 <i>7</i>	3/week	Composite		
Oil and grease	ppd		100	Monitor	3/week	Grab		
TKN	mg/L		30		1/month	Composite		
Ammonia as N	mg/L		15		1/month	Composite		
Phosphorus, total	mg/L		Monitor		1/month	Composite		

mgd = million gallons per day; ppd = pounds per day BOD = Biological oxygen demand; TSS = Total suspended solids; TKN = Total Kjeldahl nitrogen Alabama Department of Environmental Management (ADEM) permit

The Alabama Department of Environmental Management permit requires gross solids removal and dissolved air flotation treatment to remove fine solids, oil and grease.

# expecktable

[ek-spek-tuh-buhl]

Considered likely or probable to happen or arrive.

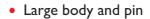
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#### >> ENVIRONMENTAL SUSTAINABILITY

divided into a 25,000-gallon anoxic zone and 110,000-gallon aerobic zone.

The biological process is designed to remove soluble biochemical oxygen demand and nitrogen. The aerobic zone breaks down nitrogen to nitrates, and the anoxic zone completes the denitrification process where bacteria convert nitrates to nitrogen gas.

The aerobic basins are preceded by a 70,000-gallon weir-box for distributing the flow between each basin and incorporating the return-activated sludge from the secondary DAF unit. All waste-activated, nutrient-rich sludge is collected and stored on site in an odor-controlled vessel. The sludge is then trucked to an agricultural site where it is land-applied as a soil amendment and nutrient supplement.

Following are other key features (see also sidebar: *Wastewater treatment system features*):

- ✓Use of a secondary DAF, instead of a final clarifier, saves on capital investment and use of space at the facility.
- ✓ Two aeration basins save on energy by allowing one basin to be shut down when the system's flow is low. It also provides flexibility to isolate flow containing inhibitory chemicals that may be released in further processing.
- ✓ Axial submersible mixers pull wastewater through openings in the internal walls of each aeration basin to move water from the oxygenated zone to the anoxic zone. This makes the anoxic process more effective with very little incremental investment.

#### People and incentives

While the facility's design is important to the system's performance, Toddes said the company's people and program make an even bigger difference.

"When you start with the philosophy that the wastewater system will not fail even before it is designed, this is reflected not only in its design, but in the investment in your people and your program. I would say that the wastewater treatment plant here

in Gadsden is OK, but the people and the program are great."

One key program decision was in selecting an engineering firm to manage the wastewater treatment system on a contractual basis. The approach means that those managers have a dedicated focus on wastewater management. It also means that the wastewater operators in Gadsden are working in an O'Brien & Gere profit center as opposed to a Keystone cost center. It's a subtle but important distinction with incentives for responsibility-taking and performance.

#### Meeting future requirements

The Gadsden plant's design provides the flexibility to meet new treatment requirements that could result from changes in the plant's further processing business (increases in productive capacity or new product formulations) or new regulatory requirements.

Uncertainty surrounding regulatory requirements at the time of the Gadsden

plant's construction in 2009 influenced the design decisions for the wastewater treatment system. Regulatory proposals for the total daily maximum loads in the Coosa River Basin were under development in 2009 and remain undetermined. The plant's design, therefore, included two build-out phases, the first of which is already in place, and the flexibility to adapt to possible future requirements such as a 1-part-per-million phosphorus limit.

#### **Objective: Invisibility**

Toddes said that his objective for the environmental system in Gadsden is to make it as invisible as possible to the company's further processing operations and the company's customers. That means being invisible to regulatory agencies by having no compliance issues. It also means being ready and able to handle changes in production volume and products. "We are protected in almost any eventuality," Toddes said, "whether from changes in product mix or new TMDLs."

#### Wastewater treatment system features

#### **INITIAL TREATMENT PROCESS**

**Rotary drum screen** removes solids and includes a self-dewatering feature for improving the capture of offal.

**Equalization basin** of 500,000 gallons provides natural pH stabilization.

**Primary dissolved air flotation** removes oil, grease and solids.

**Waste solids management** sends solids from the primary DAF to a vertical holding tank for improved dewatering.

**Variable frequency drive pumps** save on energy and control influent feed rates.

#### **SECONDARY BIOLOGICAL PROCESS**

**Flow distribution** – forward flow is split between two aeration basins with the return-activated sludge split and mixed with the forward flow.

**Initial anoxic zone** provides for ammonia removal and BOD consumption.

Aeration basins provide phosphorus uptake and ammonia conversion.

**Two aeration basins** allow for flexibility in managing the wastewater flow and save energy in blower operation.

**Secondary DAF** for final effluent polishing adds to the consistency in operational performance.

**Waste-activated sludge** is combined with primary solids for beneficial reuse in land application.

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## POULTRY'S CRYSTAL BALL

# Genetics plays large role in poultry industry's future

Genetics and selection for robustness are the keys for the poultry industry in the next five years, with nutrition, veterinary care and management playing supporting roles. BY C.Z. ALVARADO

Current economics and questions surrounding the future of food agriculture are hot topics for people in today's poultry industry. To address these topics, the Poultry Science Association recently sponsored a symposium in St. Louis addressing the future of the poultry industry.

Experts in poultry science examined the fields of genetics (Dr. Jim McKay, Aviagen),

**Read more** Poultry industry faces research challenges at www.WATTAgNet.com/25101.html Poultry breeders see paradigm shift with genomic selection at www.WATTAgNet.com/24577.html

nutrition (Dr. Steve Leeson, University of Guelph), hatchery management (Dr. Mike Wineland, North Carolina State University),

vaccination/immune modulation (Dr. Hyun Lillehoj, USDA's Agricultural Research Service), coccidiosis control (Dr. Greg Mathis, Southern Poultry Research) and antibiotic use (Dr. Bernadette Dunham, FDA's Center for Veterinary Medicine).

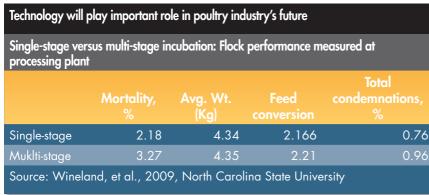
#### Tapping the genetic potential

The poultry industry has been extremely

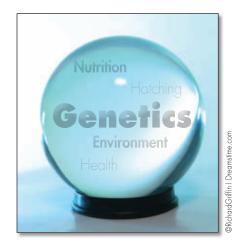
successful in supplying food for our nation while keeping the cost reasonable for consumers. After all, poultry is the most consumed meat in the United States. The

standards with proper nutrition, environmental management and health.

reason the industry has been so successful is improvements in genetic potential of breeds to achieve efficient production



Flock performance was superior in flocks from hatcheries using single-stage incubation.



Efficiency of poultry production involves less feed while maintaining the same growth rates, less environmental impact, more affordable products for consumers, less waste produced and more sustainable production. However, there are still continued challenges to poultry production. According to Lillehoj, these challenges include, but are not limited to, climate change, global food security and biosecurity.

More specifically, noted McKay, challenges can include demands for "clean stock" from consumers, producers, national programs and international trade. In addition, birds have to perform under a wide range of disease and environmental challenges.

Based upon the symposium's overall conclusions, genetics is critical to the industry's successful future. According to



#### >> POULTRY'S CRYSTAL BALL

Leeson, genetics accounts for 90% of the current and future status of the poultry industry, while the remaining criteria of nutrition (5%), environment (3%) and health (2%) are considered supporting roles.

In light of these conclusions, genetics

and selection for robustness are the keys for the poultry industry in the next five years. Selection of birds for robustness includes research in selection for improved immune response, freedom from metabolic disease and challenge testing. Genetic research in these target areas, combined with heath, nutrition, environment and management, will be what provides future success to the industry.

#### Nutrition plays supporting role

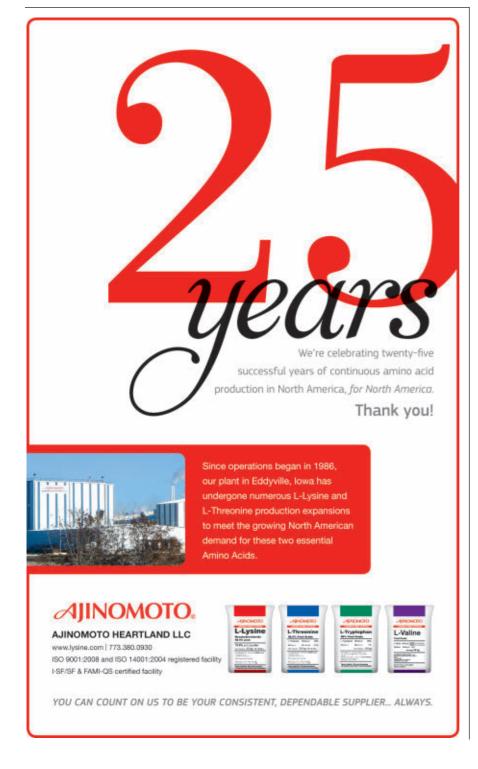
With good genetic selection in mind, nutrition becomes a critical supporting role in the future of the industry. Leeson focused on current societal issues of antibiotic growth promoters, traceability, microbial control, ethanol biodiesel and ingredients in feed. According to him, a balance of science versus societal issues is needed. For example, performance versus profitability; traditional versus AGP use; and quantity versus quality are all questions that need to be addressed.

With improved nutrition, birds are reaching target slaughter weights earlier. With this in mind, the greatest limitation and challenge for broilers from a nutritional standpoint will be calcium metabolism for skeletal integrity to allow bones to withstand processing machines. With layers, the challenge will be eggshell quality in addition to skeletal integrity. Therefore, research has recently been focused in this area.

## Hatchery management challenges

Hatchery management is another critical component to the future of the industry. The average broiler hatch is about 85% to 86% with proper management. Wineland said hatchery management is not only about increasing the hatch rate, but also to ensure the chicks that do hatch perform better in the field. Previous research has indicated that incubation affects bird performance including, but not limited to, muscle development, immune status, gut health and yield.

With improved genetics, and different breeds available to the industry for specific needs, one hatchery challenge is achieving an understanding of the current breeds' response to incubation and that different breeds may need different incubation parameters. Another important challenge is that hatcheries must be able to meet the developing embryo's needs during all



phases of development. For this reason, the industry may see an increase in singlestage incubation.

## Bird health through immune modulation, coccidiosis control

The final speakers in the symposium dedicated time to other important support areas, including bird health through immune modulation, coccidiosis control and antibiotic use.

Lillehoj focused on the future of using immune modulation. The concept is to provide birds with nutritional ingredients that interact with immune cells to initiate a defense response. By improving immune response, the bird will be able to have better health and respond to its genetic predisposition through good nutrition and management. In this regard, current research is focusing on the use of probiotics and prebiotics, bacteriophages, essential oils and herbs, and bioactive phytochemicals.

The recent withdrawal from the market of 3-Nitro (Roxarsone) as a coccidiosis control by Pfizer was a response to consumer concerns about using an arsenic compound in poultry feed. This loss will drive future studies for coccidiosis control in the poultry industry.

Coccidiosis control is a \$90 million industry in the USA and a \$3 billion industry worldwide. According to Mathis, there can be greater than 700 trillion oocytes in a 40-ft. by 400-ft. house at one time. With those numbers in mind, we can see how the industry's future will be focused on continued coccidiosis control.

Dunham also indicated that ingredient additives will have to be the future of the poultry industry to control health. Even though some of these replacements will not be as good as 3-Nitro and antibiotics, the response to consumer groups is clear and research to define replacements will be important to the future of the industry.

#### Feeding the world efficiently

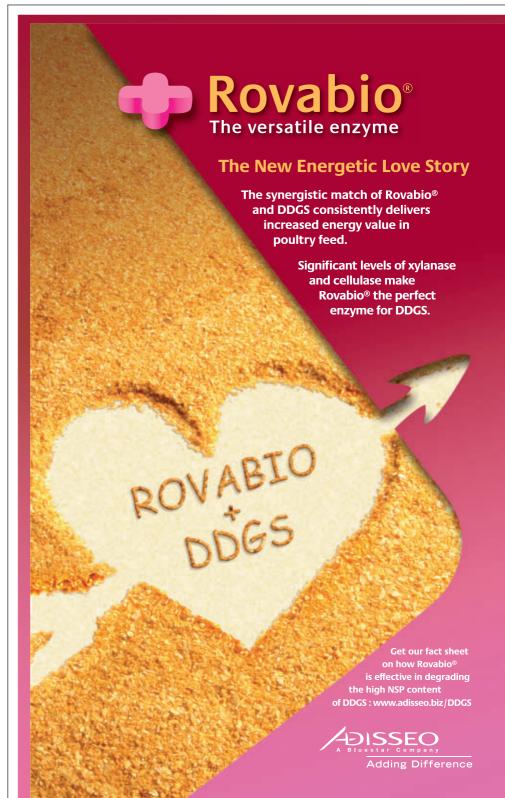
Even with all the limitations and concerns, it is important to remember

that the poultry industry has been very successful in all aspects discussed above. The industry is now able to produce a 2.5 kg male broiler at 35 days of age, a 20 kg turkey at 20 weeks of age and 335 eggs in 365 days.

All of this success has allowed the industry to feed the population of the U.S.

and abroad in a safe and efficient manner. So, even though challenges do exist, the outlook is for a profitable, safe and efficient poultry industry.

C.Z. Alvarado, Ph.D., is associate professor, poultry and egg, quality and safety at Texas A&M University.



## PROCESSED POULTRY PRODUCTS

# Keeping poultry labels clean with new ingredients

Consumer preferences for clean labels and natural ingredients in poultry can be addressed through the use of phosphate replacers and antioxidants.

BY CASEY OWENS

Research presented at the Poultry Science Association's annual meeting, held in July in St. Louis, is of potential value to producers of processed poultry products. The research ranged from factors affecting yield, ingredient effects on marination performance and product quality, to lipid oxidation and product defects.

#### Consumer issues with phosphates

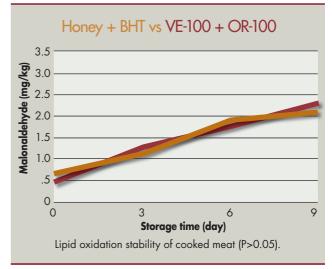
The use of "clean labels" is of importance in the food industry, including in poultry products. Consumers want to know and understand what ingredients are used in the products they purchase. They also want natural products with all-natural ingredients.

While phosphates are very functional in meat products, the term "phosphate" sometimes has negative connotations. To address natural and clean label trends, processors are interested in phosphate replacers that are natural and easy to understand for consumers. The challenge is to find ingredients that have equivalent functionality as phosphates for helping with the yield and eating quality of products.

#### Phosphate replacer

G. Casco of Texas A&M University presented research related to marinades containing phosphate replacers. The research evaluated water- and oil-based marinades including phosphate or a phosphate replacer (SavorPhos AF200; Formtech Solutions Inc.). Water-based marinades consisted of water, salt (0.7% final concentration) and phosphate (0.4%) or SavorPhos-200 (0.5%). Oil-based marinades consisted of water, canola oil (3%), salt (0.7%) and phosphate (0.4%) or SavorPhos-200 (0.5%). Two commercial phosphates were used based on whether the marinade was water or oil based, as one phosphate had better emulsification properties.

Marinades were injected into whole carcasses, WOGs, at 20%



The natural ingredient, honey, had better antioxidant properties than the synthetic BHT.

pickup, simulating a rotisserie product, and into boneless, skinless breasts at 20% pickup. The breasts were tumbled following injection. Results from the rotisserie product experiment showed that using the SavorPhos in a water-based marinade resulted in better marinade retention through 24 hours compared to using the phosphate marinade. For example, at 24 hours, the WOGs still had nearly 15% pickup when marinated with SavorPhos, compared to approximately 11% when marinated with a phosphate marinade.

#### **Cooked products**

Cook losses did not differ when using water-based marinades. Results from the oil-based marinades showed similar 24-hour marinade retention for the oil-based SavorPhos and oil-based

phosphate marinades. However, cook loss for WOGs marinated with the oil-based marinade using SavorPhos was significantly lower than the WOGs marinated with the oil-based phosphate marinade. The results indicate that

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#### >> PROCESSED POULTRY PRODUCTS

using the SavorPhos in marinades, with an oil or water base, for WOGs resulted in equivalent or better performance compared to phosphate marinades.

#### **Boneless breast fillets**

Results from the boneless, skinless breast fillet experiment showed similar results. Using the water-based marinade with SavorPhos, cook losses were significantly improved (lowered) compared to using the marinade with phosphate. Retention was not affected by the different water-based marinades. When evaluating the oil-based marinades, there was no difference in cook loss between the fillets marinated with SavorPhos or the phosphate. Because the pickup was higher in the fillets using SavorPhos, the fact that there was no difference in cook loss is a positive result.

# Use of dietary antioxidants has the advantage of no labeling requirement.

Performance with respect to yield, color, texture and sensory analysis was also conducted on fillets marinated with the marinades. There were no differences in color due to the marinade used. Fillets marinated with SavorPhos (either water or oil) had lower shear force values compared to fillets marinated with phosphate indicating that fillets were more tender. Sensory results showed no differences between breast fillets marinated with SavorPhos and fillets marinated with phosphate.

#### Yield, quality unaffected with phosphate replacer

Results of this study by Casco and C.Z. Alvarado suggest that SavorPhos AF200 can be used as a phosphate replacer in natural marinades for whole-bird and boneless breast fillet type products without negatively affecting yield or quality. In some cases, yield and/or quality was improved with the use of this phosphate replacer. This ingredient can be advantageous to the processor because it is natural and can be labeled as citrus flour and natural flavor.

The research by G. Casco and C.Z. Alvarado was titled, "Yield improvements in water and oil-based marinades with a natural-non-phosphate blend." It appeared in 2011 in Poultry Science, 90 (E-Suppl.1):334 (Abstr.).

#### Comparing dietary and meat-added antioxidants

Lipid oxidation is a concern for the meat industry because it can affect product quality, especially in further processed products that are cooked (available in ready-to-eat, or reheat, form). Flavor can be affected a great deal by lipid oxidation, which can create negative eating experiences for the consumer. C. Narciso-Gaytan presented

research that evaluated lipid oxidation stability of cooked chicken meat using dietary and meat-added antioxidants.

Using dietary antioxidants can potentially be more effective because the antioxidant is physiologically incorporated into the muscle tissue. Use of dietary antioxidants can also have some labeling advantages because they are not required to be added on food labels.

Meat-added antioxidants, on the other hand, can have advantages either by directly affecting the meat or being able to add varying amounts to the meat to some degree. However, labeling can be an issue as any antioxidant that is directly added would have to included on the ingredient statement.

#### **Antioxidants compared**

Researchers used low (10 mg/kg of feed; National Research Council recommendation) and high levels (100 mg/kg of feed) of vitamin E or oregano essential oil (100 mg/kg of feed) in the basal corn-soybean diets of broilers grown to six weeks of age. Honey (3%) or BHT (0.02%) was added to the ground breast meat from broilers fed the lower level of vitamin E (10 mg/kg of feed). Meat was ground and patties were formed. Patties were cooked to 74 C and stored over a nine-day period.

Results show that the low level of vitamin E had higher levels of oxidation (higher MDA, or malonaldehyde mg/kg) compared to the other treatments combined. However, there were no differences between dietary supplements (high level of vitamin E and oregano) and meat-added antioxidants (honey and BHT) with regard to oxidation. Furthermore, high levels of vitamin E had better antioxidant properties than using oregano at the same level, as indicated by lower MDA values. In the meat-added antioxidants, honey had better antioxidant properties than BHT, as indicated by lower MDA values.

#### Differences in lipid oxidation

Results showed that low levels of vitamin E in the diet, commonly practiced in the industry (NRC recommendation), resulted in the highest lipid oxidation. All other treatments, dietary and meat-added, had better antioxidant properties resulting in less lipid oxidation. In the meat-added antioxidants, the natural ingredient, honey, had better antioxidant properties than the synthetic BHT. Therefore, honey could be used as a natural antioxidant.

The research by F. Avila-Ramos, C. Narciso-Gaytan, A. Pro-Martinez, E. Sosa-Montes, J. M. Cuca-Garcia, C.M. Becerril-Perez and J.L. Figueroa-Velasco was titled, "Lipid oxidation stability of cooked chicken meat using dietary supplemented and meat-added antioxidants." It appeared in 2011 in Poultry Science, 90 (E-Suppl.1):331 (Abstr.).

Casey M. Owens, Ph.D., Center of Excellence for Poultry Science, University of Arkansas; phone +1.479.575.4281; email cmowens@uark.edu

# Access a free audio/video presentation of NCC's Industry Panel after the annual conference!

On October 5, 2011, during the National Chicken Council's 57<sup>th</sup> Annual Conference at the Four Seasons Hotel (Georgetown) in Washington D.C., attendees will have the opportunity to view an industry panel of influential and leading poultry industry executives sharing their views on the current state of the industry.

Access the presentation beginning October 7<sup>th</sup> on WATTAgNet.com.



The NCC Industry Panel will be moderated by **Don Jackson**, President & CEO of JBS USA, and the panelists include:

- William Andersen, Senior VP, Keystone Foods
- Mike Helgeson, CEO, GNP Company
- Mark Kaminsky, COO & CFO, Koch Foods
- Clint Rivers, Senior VP, Operations Perdue Farms

The NCC Industry Panel is being recorded by WATT PoultryUSA, and will be available as an audio/video presentation at www.WATTAgNet.com/25988.html. Simply login or sign up as a user on www.WATTAgNet.com to access the presentation and catch all that happened at the industry panel discussion. This online presentation is courtesy of Pfizer Animal Health Global Poultry.

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## INTERNATIONAL PERSPECTIVE

# India's broiler industry moving from live to processed chicken

Manually processed poultry accounts for more than 90% of demand, but modernization is spreading. DR. MRIGEN DUTTA

Indian consumers prefer to buy fresh meat from wet markets or live-bird markets. A perception exists that fresh poultry meat purchased as a live bird and slaughtered in their presence is of better quality. Consumers lack confidence in chilled or frozen meat because they believe live birds have a better taste and texture.

S

Traditional poultry dressing facilities at the wholesale or retail level are completely manual, with no sanitary measures taken for the dressing floor or the workers.

Poultry meat has been the fastest growing sector of Indian animal production and consumption for the last three decades, growing at a compound annual rate of more than 11%. The annual per capita consumption of eggs and chicken meat has grown from 10 eggs and 146 grams in the 1970s to about 44 eggs and 1.8 kilograms, presently.

#### **Broiler market volatility**

The Indian broiler sector operates

Watch Ricky Thaper, spokesman and treasurer of the Poultry Federation of India, discuss growth and obstacles on your smartphone or at www.WATTAgNet.com/20256.html.

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regions of India adversely affect meat consumption leading to a significant drop in demand. Negligible sales of frozen products, coupled with the limitation in inter-regional movement of live birds, creates vola-

tile broiler market prices. A shift to mechanical and more hygienic processing is integral to transition the broiler industry into a chilled-, frozen-product market.

## Transitioning to processed chicken

There is some demand for frozen or chilled poultry products from hotels, fast-food restaurant chains and some urban consumers. About 6% of poultry meat is sold in processed form, of which only about 1% undergoes processing into value-added products (ready-to-eat/ready-to-cook).

The modern poultry processing sector in India consists of more than 12 firms, which are mostly operated by poultry integrators located in or near major urban areas. These firms use imported equipment and follow hygienic procedures, including monitoring employee health, water supplies, sanitary conditions and refrigeration facilities.

Chilled whole birds and parts are sold in markets and shops in major cities.

almost completely as a live-bird market. Manual poultry processing accounts for more than 90% of consumption. Traditional poultry dressing facilities at the wholesale or retail level are completely manual, with no sanitary measures taken for the dressing floor or the workers. As a result, hygienic slaughtering and proper utilization of byproducts are currently the most important issues in the Indian meat industry.

Regional poultry production and consumption imbalances are also prevalent. The dominance of the live-bird market restricts the movement of poultry because of high mortality and shrinkage associated with transporting live birds. Broiler prices are based on demand and supply in a particular market on any particular day. A preference for live birds limits broiler meat consumption in markets where poultry consumers are sensitive to price.

A number of religious rituals in various



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#### >> INTERNATIONAL PERSPECTIVE



Hygienic slaughtering and proper utilization of byproducts are some of the most important issues in the Indian meat industry.

Acceptance of chilled meat is higher than that of frozen meat, yet growth in chilled meat consumption could help to accelerate the transition to frozen poultry products.

#### Consumer acceptance

Growth in the retail segment is being encouraged by new approaches from poultry integrators, including establishing integrator-owned or franchised chilled/frozen poultry shops, opening sales counters in existing food shops and home-delivery services. The recent emergence of supermarkets and shopping malls is also supporting growth in the retailing of chilled/frozen poultry products.

Most poultry integrators in India are marketing dressed and chilled products, and ready-to-cook and readyto-eat poultry products to institutional and retail customers. Consumers are paying more attention to quality and hygienic food, and the demand for processed meat and meat products is increasing.

#### Creating standards

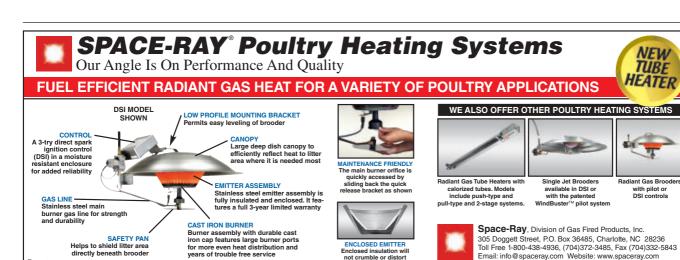
To streamline the meat and poultry processing industry, and the production of clean and hygienic meat products, the



Poultry meat is the fastest growing sector of Indian animal production and consumption growing at a compound annual rate of more than 11%.

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#### The National Meat and Poultry Processing Board addresses:

- ✓ Laying down policies for healthy development of the meat and poultry sector
- ✓ Raising domestic standards to international levels
- Addressing current environmental pollution issues created by slaughterhouse waste materials
- ✓ Developing uniform and effective national meat quality testing systems and laboratories
- ✓ Setting up training institutes for workers, technicians and managers in meat processing industries
- ✔Providing research and development for production and marketing of new value-added meat products for domestic and international markets
- ✓ Serving as a 'one-stop' service for producers, manufacturers and exporters of meat and meat products
- ✔Promoting and regulating the meat industry for increasing exports
- ✓ Helping the industry establish sustainable and viable commercial projects

government of India launched the National Meat and Poultry Processing Board. The board is developing uniform and effective meat quality testing systems and improving conditions in the wet market.

#### Future growth potential

The board plans to modernize abattoirs within five years by standardizing size, technologies, equipment and benchmarking, and establishing a consultancy division. The board also will establish five quality control and analytical laboratories for meat products by July 2012 to meet domestic and international market standards.

Tremendous growth for the Indian broiler industry exists, provided consumers are educated on the benefits of processed, hygienic poultry products.

Transition from a live-bird market

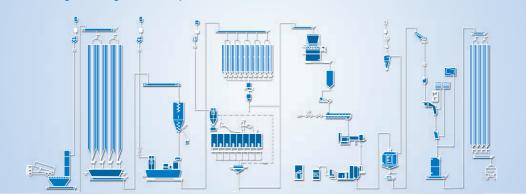
to a chilled/frozen poultry market is an important factor in future expansion of broiler production. Expansion could create potential trade and investment opportunities.

Dr. Mrigen Dutta is business development manager – poultry at Zydus Animal Health Limited and can be reached at mrigendutta@ zydusahl.com.

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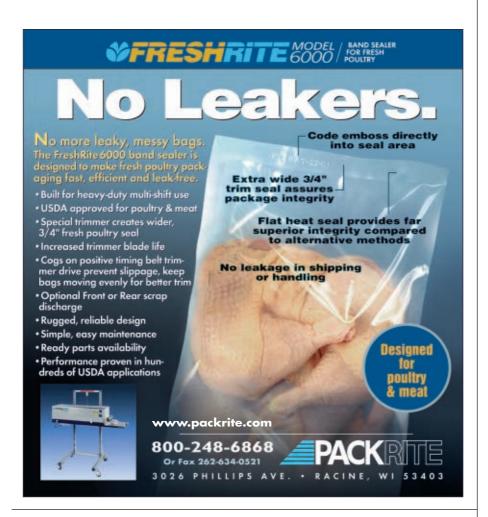
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#### **ProductReview**

## METTLER TOLEDO INC. PFA569LIFT



Mettler Toledo Inc. offers a stainless steel floor scale model, PFA569lift. The PFA569lift features a platform that allows access to the scale's interior. The scale's built-in gas springs control lifting/lowering speed and spring-loaded plungers lock the platform in place when lowered to the weighing position. The scale can be installed in a pit or on top of the floor.

www.mt.com/na

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Trouw Nutrition International's Farm-O-San range includes 20 products for animal health. The products provide nutritional solutions to specific health issues such as immune system deficiencies or digestive problems. The entire range is GMP+ certified and free of any antibiotics, according to the company.

www.trouwnutrition.com

#### TKF INC. VALU-LIFTT

TKF Inc. says its Valu-LiftT is a 4-strand, continuous lift conveyor designed to handle cartons and other smooth-bottom unit loads up to 50 pounds. The conveyor platform consists of interlocking molded polymer flights with steel connecting pins. The conveyor lifts at a maximum speed of 118 fpm, and can operate in up, down

and reversible modes, according to TKF. Standard net lifting heights range from 8-foot to 14-foot. Standard safety features include a 24 volt DC control, current sensing relay and enclosed shroud-type tunnel guards.

www.tkf.com

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Formax slicers from Provisur Technologies are offered in two different models: PowerMax3000 and CashinEDGE Multi-Slicer. The PowerMax3000 is a mid-sized slicing system with the option for up to three independent product drives. PowerMax3000 has a center rear loading system and is comparable with a PowerScanner option with 3D imaging for natural or irregularly shaped products. Formax CashinEDGE multislicer has a precision drive system with a 14 1/2-inch throat and proprietary blade technology for slicing speeds up to 2,000 rpm, the company says.

www.provisur.com

#### AIR PRODUCTS AND CHEMICALS INC. FRESHLINE QS TUNNEL FREEZER

The Freshline QS tunnel freezer from Air Products and Chemicals Inc. can be used to cryogenically freeze or cool a variety of meat products. The Freshline QS can be integrated into a new or existing production line and is ideal for smaller volume food processors. The freezers use liquid nitrogen at -196 C to achieve temperature reduction, the company says. The freezer has an automated control system that allows users to store product-specific operating set points.

www.airproducts.com

# ANRITSU INDUSTRIAL SOLUTIONS USA INC. DUAL X TECHNOLOGY

Anritsu Industrial Solutions USA Inc. developed Dual X technology to enhance the performance of its KD7400 X-ray inspection systems. Dual X technology minimizer product effect and provides a more exact method for detecting bones, the company says. The technology differentiates between the product and the contaminant by analyzing two separate X-ray energy signals.

www.detectionperfection.com



## People&Companies

Merck appointed Richard R. DeLuca Jr. as executive vice president and president, Merck Animal Health, effective September 15.

Marvin G. De Witt, co-founder of Bil Mar Foods, died August 5 at his home in Olive Township, Mich., at age 92. De Witt co-founded Bil Mar Foods with his brother, Bill, in 1938.

Aviagen Turkeys and its Valley of the Moon Commercial Poults enterprise signed a long-term agreement to supply 100% Nicholas commercial tur-

> key hatching eggs to Nash Johnson.



Chick Master Incubator Company promoted Chad Daniels to vice

Chad Daniels

president of operations.

Dr. Ashley Peterson has joined the National Chicken Council staff as vice president of science and technology. Mary Colville has been promoted from director of government relations to vice president of government affairs at the NCC.

Roger Vessell been appointed director of world marketing for Cobb-Vantress.

Roger Vessell

Kemin has appointed Matt Elkins as the company's sales manager for livestock and poultry, and Dr. Laura Wonderling as research and development director for Kemin's vet innovations division.

Tyson Foods Inc. has chosen former senior executive Kathleen M. Bader as a new independent board director on the company's board.

The Animal Agriculture Alliance has hired Catharine Kuber, who will serve as membership services manager, and Kerry Lynch, who will fill the role of communications and membership coordinator.



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### **Datelines**

201

Send trade show, meeting and technical symposium information to: Gary Thornton, WATT Poultry USA, at gthornton@wattnet. net. For a comprehensive list of events plus detailed information go to Events at www.WATTAgNet.com.

#### 2011

#### **NOVEMBER**

#### **Process Expo 2011**

**1**»McCormick Place South Hall, Chicago, IL, United States, www.myprocessexpo.com

#### **USPOULTRY Communication Strategies Workshop**

2»Marriott Marquis, Atlanta, GA, United States, www.poultryegginstitute.org

#### AFIA Equipment Manufacturers Conference 2011

**3**»Sheraton Beach Hotel, Ft. Lauderdale, FL, United States, +1.703.524.0810, www.afia.org

#### Kansas State University HACCP Program short course

**7**»Kansas State University, Manhattan, KS, United States, www.afia.org

#### 2012

#### JANUARY

#### 2012 International Poultry Expo

**24**»Georgia World Congress Center, Atlanta, GA, United States, www.ipeweek12.org

#### **MARCH**

#### AFIA Purchasing & Ingredient Suppliers Conference 2012

**12**\*Omni at ChampionsGate, Orlando, FL, United States, +1.703.524.0810, www.afia.org

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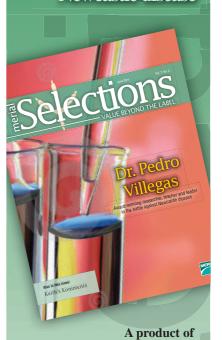
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# PoultryUSA

#### MARKETING AND SALES TEAM

#### **USA-based Sales Staff:**



Steve Akins V.P./Publisher sakins@wattnet.net Phone 919-387-7961



Pam Ballard USA Regional Sales Manager Midwest, West, Canada pballard@wattnet.net Phone 815-966-5576 Fax 815-968-0941



Mary Harris USA Regional Sales Manager East, Southeast mharris@wattnet.net Phone 847-387-3167 Fax 847-908-7551



Ginny Stadel Classified Sales Manager gstadel@wattnet.net Phone 815-966-5591 Fax 815-968-0941

#### **World-based Sales Staff:**



Michael van den Dries Regional Sales Manager driesmvd@xs4all.nl Phone +31-79-3230782 Fax +31-79-323-0783



Frans Willem van Beemen Regional Sales Manager beemenfw@xs4all.nl Phone +31-344-653442 Fax +31-344-653261



Tineke van Spanje Regional Sales Manager for Latin America Classified Sales and Digital Products tvanspanje@wattnet.net Phone +31-495-526155 Fαx +31-495-525126



Dingding Li Regional Sales Manager for Southeast Asia Hong Kong and Taiwan dingdingli@vip.163.com Phone +86-21-54136853 Fox +86-21-54133676

## **Marketplace**

For information about Marketplace advertising, contact Ginny Stadel. Phone 815-966-5591, Fax 815-968-0941, E-mail: gstadel@wattnet.net. WATT PoultryUSA rate is: \$165 per inch per insertion (1-time rate), \$150 per inch per insertion (6-time rate), or \$140 per inch per insertion (12-time rate). The production charge is included except for ads with excessive make-up demands. Logos are acceptable. Make your classified stand out - add color for an additional \$40 per color per insertion.

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# **DEDITION SECTION 1**BY GARY THORNTON

# Sanderson Farms CEO foresees industry cuts ahead

ith no relief in sight from high corn prices and continued weak consumer demand for chicken, Sanderson Farms reported a net loss of \$55.7 million in the third quarter of fiscal 2011, while predicting that a new round of industry production cuts would be needed this fall.

Like other U.S. chicken producers, Sanderson Farms' profitability is being skewered by high grain costs against weak chicken pricing. In its third quarter ended July 31, the company reported grain costs were up 12.6 cents per pound of processed chicken, while the average sales price of poultry products sold was down 5.3 cents, or 7.3%. Boneless breast prices in the third quarter were down even more sharply, by 22%.

The chicken market may have bottomed out in July, however, as the industry continued to ride out a cycle of deep losses with three companies already having declared bankruptcy.

#### Industry faces production decisions

Will the current production cuts be sufficient to keep chicken prices at profitable levels? Factoring in the seasonal drop in demand for chicken after Labor Day and the weight-inducing cooler broiler growing weather, the industry's earlier 6% reduction in the number of head probably won't be enough to maintain profitability, said CEO Joe F. Sanderson, Jr., in the

# Are more cuts in chicken production needed?

company's third quarter earnings call. "It wouldn't surprise me if the industry makes further, deeper reductions in egg sets in October or November," he said.

"Nobody knows what cuts might be needed until we get to October," he said, "but I think that the cutbacks may need to be more than the 6% in head that the industry already has in place." If the 6% reduction in head translates into something less in total pounds, he added, it will not be enough to achieve the needed industry profitability.

#### Sanderson will keep seasonal adjustment in place

For its part, Sanderson Farms will implement its normal

fall production cut of 4% and keep it in place beyond January of 2012. "Given what we expect to be a very high costs environment into calendar 2012 and sluggish demand from our foodservice customers, we will extend



our previously scheduled November and December holiday production cuts into calendar 2012 to balance our supply with expected demand from our customers. We will leave that production cut in place until demand from our customers improves," Sanderson said.

The company projects it will produce 711 million pounds of chicken in the fourth fiscal quarter of 2011, 663 million pounds in the first quarter of 2012 and 685 million pounds in succeeding quarters.

Sanderson said the company's production cuts are to remain in place until demand improves – even if industry profitability returns in 2012. "We aren't going to set any more eggs until we pick up a big account or we can't supply our customers' needs. We think demand improvement will require unemployment to drop," he said.

#### Prices needed in 2012 to offset higher grain costs

What level of pricing will be needed in 2012 to restore profitability? Sanderson shared a model that he said should get profitability back to 2009 levels – the most recent period of widespread and healthy profitability for the chicken industry.

Based on \$7.25 a bushel corn (CBOT) and \$350 a ton soybean meal, Sanderson offered the following targets for average chicken prices in 2012: boneless breast meat at \$1.41 a pound (\$1.59 quoted by Urner Barry), wings at \$1.20 a pound and leg quarters at 45 cents a pound. He said U.S. Department of Agriculture Georgia Dock whole bird prices would need to exceed 95 cents a pound.

Adding further perspective, Sanderson said the pricing factored in a doubling of the cost of fat since 2009. The cost increases for fat in feed amounted to more than the increases in soybean meal over the period. The pricing also included an additional \$9 million in costs for the increased basis for purchasing corn.

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