

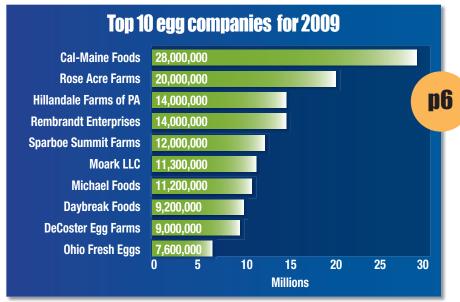
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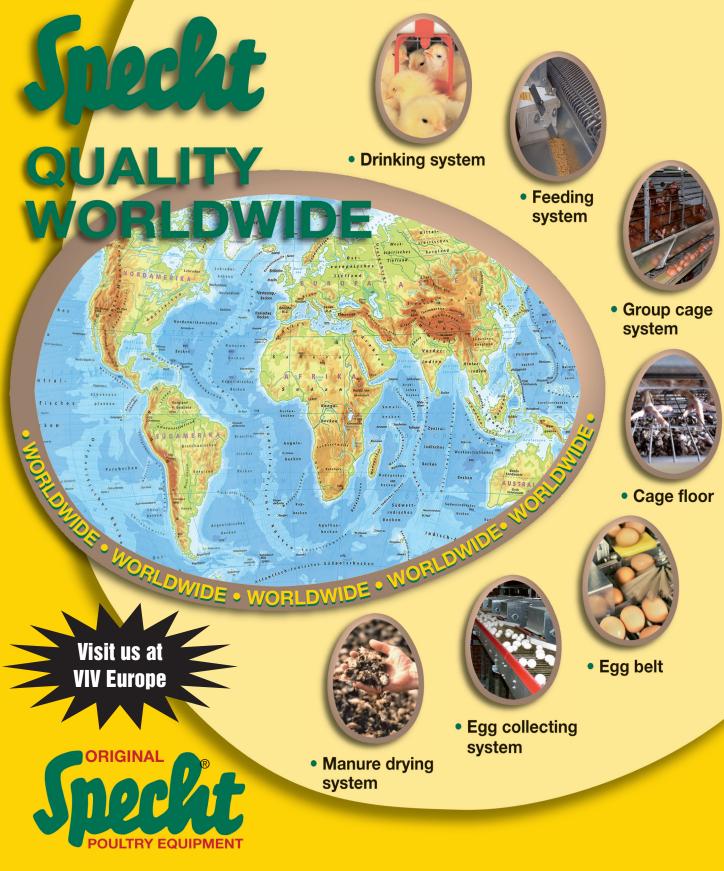




Recent research fails to quantify commercial parameters or extend data to financial return.



Egg Industry Survey ranks top 60 producers for 2009; shows overall drop in flock sizes.



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EDITORIAL

BY DR. SIMON M. SHANE

Applying what we've learned

s we enter a new year and a fresh decade we should consider how we responded to the challenges of 2009 in order to apply the lessons learned in 2010.

The favorable outcome of Ohio Issue No. 2 represents hope for rationality in



Simon M. Shane

evaluating confined housing of livestock.

The approach of establishing an impartial Livestock Management Board is to be emulated by Missouri and perhaps Nebraska.

Various trived and claimed episodes of mis-

management during the year were investigated by a committee of the United Egg Producers (UEP) which responded appropriately with press statements refuting claims. The lessons from the various occurrences relate to the need to depend on the resources of the UEP which represents our industry and can draw on the knowledge and experience of members, consultants and specialists for our mutual security.

Although the cost of ingredients has imposed a heavy burden on producers, nutritionists are formulating to more precise specifications and using enzyme feed additives to enhance nutrient availability.

The advent of the long-awaited FDA Final Rule on SE may be subject to some difficulties in implementation. Again the representations made by industry have highlighted defects in the proposed procedures for diagnosis and response to "positive" environmental assays. Hopefully the discrepancies between what the FDA requires and what is practical and in the end, beneficial to consumers, remain to be resolved and reconciled this year.

The Annual IPE is a time for renewing friendships, establishing new contacts and reviewing innovative equipment and services. WATT has a long history of cooperating with the USPOULTRY and its forerunner in providing technical assistance and publicity. Our magazines and websites will highlight new products and research and identify trends in production, processing and marketing. My colleagues responsible for the production of Egg Industry join me in wishing you all a successful 2010 IPE and a profitable year.

Simon

sshane@nc.rr.com

Precision Beak Trimming trim 2 birds at a time up to 2,000 birds per hour per two man team accurately control cauterization time and temperature accurately control chick count per cage ability to remove cage liners at time of beak trimming ability to seperate chicks with accurate chick count at time of beak trimming · operator comfort through air ride seat From Baer Systems, Inc. 28802 40th Ave S Lake Park, MN 56554 Visit us at IPE Booth 1428 Tel: 218-937-5357 Fax: 218-937-5170 baersden@rrt.net

EggIndustry

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What are the real results of housing regulations?

Recent research fails to quantify commercial parameters or extend data to financial return.

Simon M. Shane, Editor



Impact of housing on behavior has implications for welfare and the formulation of policy.

he USDA-ARS Livestock Behavior Research Unit in conjunction with the Department of Animal Science, Purdue University has recently published results of two studies to evaluate behavior of laying hens in relation to housing. In the first paper a conventional battery cage system was compared to a European-style furnished cage. This alternative has been adopted in Germany since it is considered to be an acceptable alternative to conventional cages to promote welfare.

Furnished cages have solid metal walls, perches, a dust bathing area, scratch pad and nest box. The results obtained in Indiana apparently favored furnished cages with respect to "higher levels of comfort behavior expressed

by the birds." The authors concluded that furnished cages "may be a favorable alternative system for battery cages in housing birds for egg production."

Questioning the conclusions

On closer review the following facts are apparent:

- ✓The comparisons involved 100
 hens each which is inadequate in relation to extrapolating to a commercialscale unit.
- ✓The hens were housed in a conventional cage at 100 in² per bird. This is in excess of the current 76 in² specified in the UEP Program.
- ✓ Conclusions were based on computerized evaluation of surveillance videos depicting behaviors including feeding, drinking, walking, preening,

pecking and alteration in behavior. There is no established correlation between specific behaviors and stress,

Learn more about managing flocks "Management impact on pullet and layer flocks" www.WATTAgNet.com/11770.html

other than the previous observations made by European researchers. The numerical differences between battery cages and furnished cages varied markedly within treatment according to age. The differences between the treatments, despite some significant values, do not appear persuasive.

- ✓There was no attempt made to correlate behavior with a physiological measure such as plasma corticosterone level or lymphocyte to heterophil ratio.
- ✓It is noted that six birds (6%) among the treatment in furnished cages demonstrated pododermatitis. If this observation is consistently associated with this housing system, additional work is necessary to develop a cage floor which is more conducive to the well-being of flocks. Commercial experience does not show any obvious prevalence of pododermatitis in either first or second cycle hens in conventional U.S. cages with a floor slope of less than 6 degrees.

Study of feeder space

The second article² evaluated the effect of feeder space on the behavior of hens housed in conventional cages. Trough space ranged from 2.3 inches to 4.8 inches per hen. Intuitively the number of hens feeding simultaneously related to the allocation of feed space

with obvious competition evident at the two lowest feed space levels evaluated. There was no significant interaction with number of hens feeding and the time of day or feed space allocation.

The authors derived conclusions from observations of feeding frequency including "hens with less feeder space utilize more food in less time,

ers could be adjusted to conform to the physiologic need of flocks. This is especially the case with light-weight pullets during the period following onset of production and during hot weather.

Lack of commercial application

The significant omission in both trials was the failure to quantify commer-

investment and production practices based on both scientific observation and performance parameters.

There is a concern that welfare standards recommended by panels of scientists may be unduly influenced by fragmentary research and studies which do not relate to the commercial situation. Researchers should be more

> attuned to the needs of and primary breeding when designing and executing studies which

have potential application to the commercial situation.

¹Pohle, K. and Cheng, H -W. (2009) "Furnished cage systems and hen well-being: Comparative effects of furnished cages and battery cages on behavioral exhibitions in White Leghorn chickens" Poultry Sc. 88: 1559-1564.

²Thogerson, C. M. et al (2009) "Effect of feeder space allocation on behavior of Hy-Line W-36 hens housed in conventional cages" Poultry Sc. 88: 1544-1552.

The egg industry ... should be in a position to the industry and should consult with their scientific and production practices based on both scientific involved in production and primary breeding and primary breeding. observation and performance parameters.

perhaps reflecting increased feed wastage" although there was no data quantifying actual feed consumption. The only practical concept derived from the study is that hens tend to increase feed intake in anticipation of darkness. Generally feeding periods are spread evenly through the illuminated period of the day and it is therefore possible that the frequency of operating feedcial parameters such as egg production, feed intake, egg mass or conversion or to extend this data to financial return. Studies on housing which show effects on behavior have implications for welfare and the formulation of policy. The egg industry which indirectly funds studies on housing, management and behavior should be in a position to make value judgment decisions on

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2009 Egg Industry Survey:

Overall flock sizes drop in 2009

Acquisition of Golden Oval advances Rembrant Farms' ranking.

Company	Total layers	Company	Total layers	Company	Total layers
Cal-Maine Foods	28,000,000	Wabash Valley Produce	3,800,000	Kreher Farms	1,350,000
Rose Acre Farms	20,000,000	Dutchland Farms	3,500,000	Ritewood Egg Farm	1,300,000
Hillandale Farms of PA	14,000,000	National Food	3,400,000	Konos Inc.	1,250,000
Rembrandt Enterprises	14,000,000	Creighton Bros.	3,000,000	Hemmelgarn & Sons	1,200,000
Sparboe Summit Farms	12,000,000	Valley Fresh Foods	2,900,000	Radlo Foods	1,200,000
Moark LLC	11,300,000	Mahard Egg Farms	2,800,000	Rindler Poultry	1,200,000
Michael Foods	11,200,000	Hamilton Farm Bureau	2,400,000	Wilcox Farms	1,200,000
Daybreak Foods	9,200,000	RW Sauder	2,300,000	L & R Farms	1,175,000
DeCoster Egg Farms	9,000,000	S & R Egg Farms	2,200,000	Pine Hill Egg Ranch	1,110,000
Ohio Fresh Eggs	7,600,000	Dixie Egg/Foodonics	2,200,000	Country Charm Eggs	1,100,000
Weaver Brothers	6,800,000	Willamette Egg Farms	2,200,000	Delta Egg Farms	1,100,000
Midwest Poultry Services	6,000,000	Braswell Foods	2,100,000	Morning Fresh Farms	1,100,000
Center Fresh Egg Group	5,700,000	Esbenshade Farms	2,000,000	Pearl Valley Eggs	1,100,000
Fremont Farms of IA	5,400,000	Gemperle Enterprises	2,000,000	Dorothy Egg Fram	1,100,000
Herbruck's Poultry Ranch	5,320,000	Demler Enterprises	1,800,000	Sunrise Farms LLC CA	1,000,000
Fort Recovery Equity	5,000,000	LaValle Egg Farms	1,800,000	Dakota Layers Coop	975,000
Hickman's Egg Ranch	4,300,000	J.S. West	1,675,000	SKS Enterprises	800,000
ISE America	4,300,000	Sunrise Acres	1,600,000	Egg Innovations	450,000
Sunrise Farms Inc IA	4,000,000	Berne Highway Hatchery	1,500,000	Nature Pure LLC	210,000
Kreider Poultry Farms	4,000,000	Pilgrim's Pride Corp.	1,400,000	Total	258,815,000
Maxim Egg Farm	3,800,000	Cooper Farms	1,400,000		

he 2009 survey of the U.S. egg industry was completed in early December. Rankings of 60 producers based on flock size are shown here and additional information from the survey will be highlighted in February's *Egg Industry*.

Major changes from 2008 include:

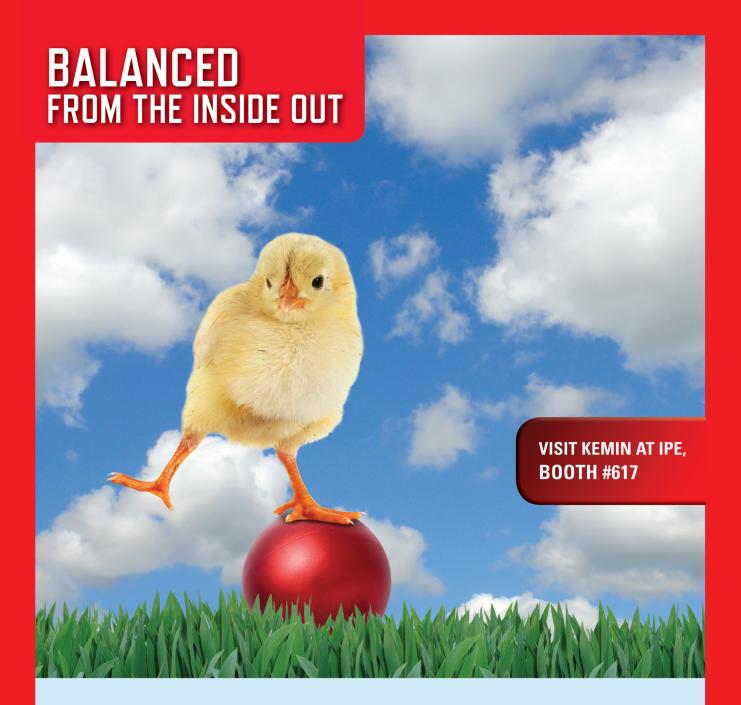
✓ Rembrandt Farms advancing to a joint third place rank-

ing following acquisition of Golden Oval.

✓Small individual but collectively significant downward adjustments in flock size by some of the larger companies including Cal-Maine Foods, Decoster Egg Farms, Fort Recovery Equity, ISE America and Maxim Egg Farm.

✓Increases in flock size by Weaver Bros, Fremont Farms of IA and Valley Fresh Foods.

The results of the survey including an interpretation of trends will be included in February's *Egg Industry* which will represent the responses of a larger cohort of participants compared to 2008.



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New Kemin plant processes pigmenting agents

Marigolds and red pepper provide natural ingredients.

Simon M. Shane, Editor

emin Agri-Foods North America, located in Des Moines, Iowa, has recently commenced production from a new plant designed to process and pack OroGLO natural pigmenter extracted from marigold petals and KemG-LO red pigment from peppers. The plant

For further information access the company website www.kemin.com

materials are derived from approved and monitored farms in Southeast Asia including India and China where there is a well established history of marigold and pepper production.

Raw material is processed by extraction and purification and the oleoresins are stabilized before export. Each batch is subject to stringent quality control to insure potency and freedom from contaminants before shipment and after arrival at the Kemin plant. There are two manufacturing streams for dry and liquid product respectively. The new plant incorporates

years of Kemin technology to produce a highly stable and bioavailable product. Product is stabilized to the correct pH and is then split into either the dry or liquid steams.

Product which is added to mixers in liquid form is titrated to correct concentration and is packaged in totes or



R&D Campus, Kemin AgriFoods North America and affiliate companies.



Carotenoids plant at the new Kemin AgriFoods facility in Des Moines, Iowa.

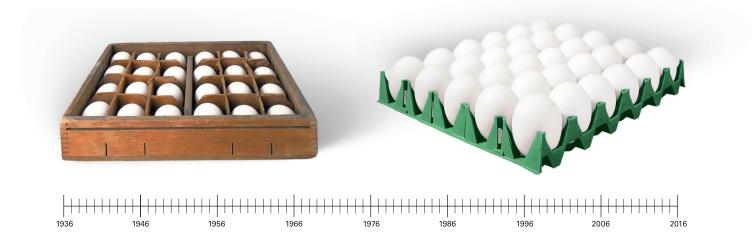


Quality assurance laboratory at Kemin's new facility.

made available for bulk truckload distribution. The dry product stream is processed and blended by mixing with a carrier to the correct consistency and xanthophyll content. Products are labeled as to composition and batch and are embargoed until quality control assays have been completed.

OroGLO dry has a xanthophyll concentration of 20g/kg and KemGLO dry assays at 5g/kg. Nutritionists use these values in their ingredient matrices to formulate diets to contain a predetermined level of dietary xanthophyll consistent with the desired level of yolk pigment.

Feed conversion has never been more important than today.



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Feed conversion is not a new concept at Hy-Line. Our never-ending research goal has been selecting layers that produce more eggs with higher egg mass on less feed. And since we started that research project in 1936, generations of efficient, high performance layers have been successfully adding to the profitability of egg producers around the world. And will be for generations to come.

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Products, services, education ... all at IPE/IFE 2010

More than 700 poultry and feed industry suppliers plus networking and informational events come together in Atlanta in January.



uary 27-29, at the Geor-

gia World Congress Center in Atlanta, will showcase equipment

and services from more than 700 poultry and feed suppliers and offer educational opportunities before and during the expo.

The following activities sponsored and organized by the U.S. Poultry and Egg Association will be of particular value to the egg industry:

✓International Poultry Scientific Forum, January 25-26, offers presentations of new research on health, nutrition, food safety and management by leading academics.

www.ipe10.org; www.ife10.org

Show Hours:

10 a.m. – 5 p.m. – Wednesday and Thursday 9 a.m. – 1 p.m. - Friday

✓ Animal Agriculture Sustainability Summit, January 26-27, will review biofuels, renewable energy and other hot button issues with presentations by industry leaders.

✓ Forum on Industry Economics, January 29, will feature three experts on industry trends and drivers of profitability.

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When Ludwig Bening founded his mechanical engineering company in 1949 he probably never imagined it would grow to become such a significant company in the livestock production markets.

Over the course of 60 years LUBING has established itself as one of the leading companies developing innovative products for poultry watering and egg conveying systems. It's our Tradition of Innovation that has contributed to our success and will continue for years to come.

We take this opportunity to express our gratitude to all of our customers who have helped in our success.

And the Tradition lives on.



IPE/IFE Educational Event Schedule

Monday, January 25

8 a.m. - 5 p.m. International Poultry Scientific Forum, Rooms B308 - B315

Tuesday, January 26

8 a.m. - 3 p.m. International Poultry Scientific Forum, Rooms B308 - B315

9 a.m. - 5 p.m. Pet Food Conference - Zell Miller Conference Center,

Rooms B301 - B306

9 a.m. - 9:15 a.m. Opening remarks

International Market Session

9:15 a.m. - 10:15 a.m. International Pet Food Markets

10:15 a.m. - 11:15 a.m. International Protein Ingredient Purchasing and Supply

11:15 a.m. - 12:15 p.m. International Regulatory Update

12:15 p.m. - 1:30 p.m. Lunch on your own

Pet Food & Ingredient Safety Session

1:30 p.m. - 2:30 p.m. AFIA's Salmonella Control Guidance Document

2:30 p.m. - 3:30 p.m. FDA's Regulatory View of Salmonella Control in Pet Food, Ingredients and Feed

3:30 p.m. - 4 p.m. Break

4 p.m. - 5 p.m. How to Deal With State and Federal Inspections

5 p.m. - 6:30 p.m. Cocktail Party

 $1\ p.m.\ \ \text{-}\ 5\ p.m.\ \ \text{Animal Agriculture Environmental Sustainability Summit,}$

Room A411

An Environment of Compliance

A Legal Perspective on Compliance

Regulatory Compliance/Where is EPA Heading?

Fundamentals of Climate Change

Environmental 101

Greenhouse Gases and Carbon Footprints

Developing and Communicating Your Sustainability Program

Dairy Producer's Perspective

Processor's Perspective

Benefits of Sustainability

Wednesday, January 27

8 a.m. - noon Pet Food Conference - Zell Miller Conference Center,

Rooms B301 - B306

8 a.m. - 8:15 a.m. Opening Remarks

8:15 a.m. - 9:15 a.m. Lessons in Feed Ingredient Approvals

9:15 a.m. - 10:15 a.m. Update on Domestic Pet Food and Ingredient

Regulatory Priorities

10:15 a.m. - 10:45 a.m. Break

10:45 a.m. - noon Q&A with AAFCO Representatives

8 a.m. - 11 a.m. FSIS Noncompliance Record Workshop

(pre-registration required), Room A406

9 a.m. - 11:30 a.m. Animal Agriculture Environmental Sustainability

Summit, Room A411

Importance of Corporate Sustainability Programs

Stakeholder Expectations Panel: Discussion: Why Sustainability

is Important

USDA Perspective

Thursday, January 28

8:45 a.m. - 10 a.m. The 'Welfare' Trap: Gut Health, Leg Problems and

More, Seminar/Panel, Room B206

9 a.m. - 11 a.m. AFIA International Feed Education Program

Feed Regulatory Update and Review of Legislative Issues

Proper Die and Roll Design and Selection

9 a.m. - 11 a.m. Nutrient Management Plan Workshop, Room A407

9 a.m. - 11:30 a.m. USPOULTRY Education Program, Room A411

Animal Agriculture under Attack

9 a.m. - 11 a.m. Equipment Safety - Machine Guard Workshop, Room A405

Friday, January 29

8 a.m. - 10:15 a.m. Market Intelligence Forum, Room A-411

Poultry Update: Domestic and international Perspectives

Looking to the Future: A Macro-Economic Perspective

8 a.m. - 11 a.m. FSIS Noncompliance Record Workshop

(pre-registration required), Room A406

| IPE/IFE 2010 |

✓InfoMarts located in both halls will offer presentations concurrently to highlight innovative products.

New in 2010

A unique, new "FeatherFest" will take over Atlanta during the Expo, sponsored by USPOULTRY and the Atlanta Convention and Visitors Bureau. Participating Atlanta restaurants will create special menu poultry dishes exclusively for IPE week. Attendees are invited to enjoy some of the best restaurants Atlanta has to offer, then vote on the "Best Of" poultry dishes at the show or online.

For complete expo details visit: www.ipe10.org and www.ife10.org.

2010 Guide available online

Turn to the 2010 International Expo Guide to maximize your time at the International Poultry/ International Feed Expo, January 27-29, in Atlanta, Ga.

Turn to the Guide for:

✓Information on more than 700 poultry and feed industry exhibitors,

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✓ Quick reference alphabetical index of exhibitors,

✓ Exhibit floor maps, and

✓ A schedule of educational and networking

To start using the 2010 International Expo Guide, go to www.digitalexpoguide-digital.com



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Sensitivity to costs, environment direct technology development

Douglas Mack, president of Diamond Moba Americas, pulls from global market experiences for new product development.

oug Mack was appointed president of Diamond Moba Americas in November 2008. He obtained a degree in industrial engineering from Clarkson University in New York in 1984, and gained extensive experience in the Industrial & Power Systems Di-



Douglas Mack

vision of General Electric where he was involved in sales and service management. After a period with Munters in the U.S. agricultural industry, he was recruited for the top position at Diamond with responsibilities for

North and South America. In January 2009, Doug led the integration of Diamond and Moba USA.

He is also president of OvoPro, involved in further processing of eggs, and interacts with the Petersime and may, in fact, have assisted the egg industry since consumers are seeking value-priced protein which they find in eggs. U.S. expansion has slowed mainly due to the uncertain regulatory environment for live production standards and tight investment capital markets. Demand should remain steady and hopefully prices should not deteriorate too much for the next 12 to 24 months.

EI: What are some the challenges facing the industry and their possible solutions?

DM: There is a whole array of challenges that are not necessarily under the control of producers. The price of feed is driven in large measure by crop yields and both domestic and foreign demand. Diversion of corn to ethanol is an important consideration and influences the cost of production. There is a growing emphasis from consumers and the federal government on food safety standards. In response, Diamond Moba Americas is actively evaluating

DM: I am frequently asked by customers how much investment we are making in product development. I reply that all senior managers within our operating and holding companies drive investment in R&D as the means of sustaining business vitality. This exemplifies the impor-

Keep up-to-date with Diamond Moba and its products at www.dma-group.com

tance Diamond Moba Americas placed on technical improvements and satisfying the needs of our customers. We are looking at water conservation and power consumption which influence cost, and both factors relate to environmental considerations as well. Labor efficiency, especially in post-pack handling, is being addressed. Speed, efficiency, processing cost and quality are all incorporated in our approach to R&D. We have an energized and talented group of engineers, many of whom have gained experience in other industries. They are bringing new concepts to what in the past was a traditional approach to egg grading and packing. An example is our initiative to improve the drying of eggs at high production rates with minimal expenditure of energy.

EI: Since you are now part of a multinational with an affiliate enjoying a significant market share in the EU do you foresee potential for technology transfer?

Read Q&A with Doug Grieve, president of Hy-Line International "Approaching today's poultry and egg industry" www.WATTAgNet.com/11715.html

Jamesway incubator companies.

All fall under the umbrella of Food Processing Systems, a privately held Dutch holding company with activities in equipment for the egg, fruit and vegetables and hatchery industries.

Egg Industry: How do you view the outlook for the U.S. egg industry?

Douglas Mack: The outlook for the industry is good. The current recession

possible improvements in our equipment which will benefit producers and ultimately consumers. Environmental restraints will intensify, but again technology could provide cost-effective solutions. Consumer expectations are increasing and the egg industry will have to provide higher levels of quality.

EI: How is Diamond Moba Americas approaching innovative technology?

ATLAS TECHNOLOGY



Environmental Control

Egg Flow Control

Command III

Egg Counters

Feed Scales

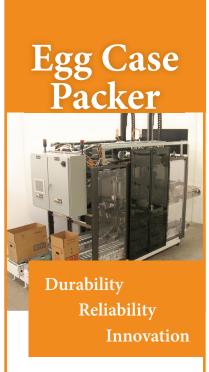
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Crackless Egg

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Massman's **simplicity of design** means virtually no
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trays or cartons without change
parts. **Simplicity of operation**contributes to ease of maintenance through accessible
placement of the few essential
serviceable components.

FEATURES:

- Packs 20- and 30-count trays,
 12- and 18-pack cartons of eggs!
- Two independent packaging lanes.
- Servo drives on the loaders are fast, accurate and quiet.
- Capable of 25,000 eggs per hour, per lane.

For innovative solutions to your packaging needs call Massman Automation Designs, LLC; designers and manufacturers of precision automated packaging machinery.



Sensitivity to costs, environment

DM: Sharing of ideas and assessing the respective values of each of the product lines was initiated within weeks of the formation of the new company. Obviously, the U.S. has experience in egg washing and drying. Our EU col-

leagues can also apply advantages derived from their specific market focus. We believe that we can achieve the best of all possible worlds through sharing technology and experience.

EI: How will Diamond Moba Americas approach marketing new technology to a price-conscious industry?

DM: We appreciate that availability of capital is a restraint to replacing existing installations. We hope to demonstrate that the return on capital from upgrading will be beneficial to the bottom line of our customers. We believe that improved service, preventive maintenance, sharing knowledge and assisting our clients to achieve

Environmental restraints will intensify, but again technology could provide cost-effective solutions.

optimal production levels will help justify the costs of upgrades and replacement on the basis of total cost of ownership. All new egg grading products offered by Diamond Moba Americas include advanced self timing and auto diagnostic features. It is possible for Diamond Moba Americas to remotely monitor operation of installations and to recommend adjustments and/ or replacement of components to improve efficiency and prevent breakdowns.

EI: What is your long-term vision for Diamond Moba Americas relative to the industry?

DM: We at Diamond Moba Americas believe that we should act as stewards of the industry, and we constantly refer to our accountability to our customers. To this end we have initiated a program of listening to our customers, analyzing their needs and developing appropriate technology that addresses all of the external variables they must manage. This is an ongoing process to create ever greater value for customers in order that they may achieve sustained success.

Exceptional To be sold: second-hand egg breaking complete plant

3 breaking/separating machines - 3 filters with 3 pumps - 1 centrifuge with shell screw

2 exchangers coolers
Liquid egg storage before
pasteurization for sweetened and salted
mixing: 2 tanks capacity 2.500 I
5 tanks capacity 4.200 I - 4 centrifugal
pumps, 1 volumetric pump

- 1 pasteurizer capacity 2.000 l/hr 1 pasteurizer capacity 4.000 l/hr 2 filling posts for 20kg buckets or bottles
- 2 filling posts for 1.000 l tanks 1 containers washing post with C.I.P. 2 centrifugal pumps, 2 dosing pumps, 1
- heat exchanger
 1 Clean In Place (C.I.P.) for the whole plant
- 1 tank with 4 compartments capacity 2.500 I each (soda – acid – recovered water – water) – 1 heat exchanger Finished products storage after pasteurization:

2 tanks capacity 15.000 l
1 tank capacity 25.000 l
Outside storage tanks: 2 isolated cooled tanks capacity 25.000 l
1 filling pump for tank trucks - All process and piping automatic valves

Diamond 8400 egg grader

year: 2004 - capacity: 144.000 eggs/hr – 2 AD200 loaders – crack, leak, dirt detectors – Inkjet interface – 10 euro denesters – 1 stacker – 10 automatic packers AP80 – 10 boxes closing systems – 1 farm packer 36.000 eggs/hr – 1 manual packing line

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Readers are encouraged to share their comments and solutions with the editor at sshane@nc.rr.com

Promoting quality: an interactive exercise

Egg Industry's second question for reader response – preventing cannibalism.

rom time to time *Egg Industry* will describe a common or emerging problem which impacts production or quality. It is hoped that readers will respond with comments and suggestions which will be shared in subsequent issues.

Exercise January

Situation: Cannibalism in brownfeathered laying flocks housed in broiler breeder units with slats and litter.

History and observations: Two flocks in adjacent houses, each comprising

16,000 hens. Flocks allowed 1.5 ft² of floor area/ hen at 16 week transfer. Standard hen-housed egg production, livability, feed conversion and egg mass were recorded through week 38. At this time mortality increased sharply from 0.1% per week to over 1.0% in week 41. Hen-week egg production declined by 20% over the period.

At 68 weeks cumulative production data compared with standard is shown below:

Cumulative

Livability

85%

96%

Flock

Standard

Body

Wt

4.1 lb

4 9 lh

Prod

78%

76%

Eggs H/H

262

285

Wt.

49.8 lb

52.0 lb

Intake/Hen

0.246 lb

0.254 lb

realities of flock behavior and the law of unintended consequences before issuing directives based on perception, emotion and limited-scale trials under laboratory conditions.

Rocks rising of floor area/en-housed egg sion and egg 8. At this time 6% per week to gg production on data com
Hen week Cumulative Case Daily Feed

Persecution of low peck order hens is the

inevitable result of adhering to "welfare"

requirements restricting beak treatment in non-confined flocks certified for or-

ganic production. Cumulative losses

can amount to 25% of the flock. "Expert

panels" should become familiar with the

Persecuted non-producing hens seek sanctuary on nest modules. Affected hens show vent peck and loss of feathers and are lighter than pen mates due to reduced feed intake.

The flock was extremely "flighty." Hens showed variation in beak trim from complete re-growth to removal of the tip of the maxillary beak, consistent with beak treatment at the hatchery with no subsequent trim. Approximately 5% of the flock

was perching on nest modules and the egg collection rail. These birds showed lacerations of the skin surrounding the vent and contusions of the head and neck. Most of the hens

View the response to preventing fecal deposits on shells at www.WATTAgNet.com/12671.html

on nest boxes were not in production and were appreciably lighter in weight (2.8 lbs) compared to the remainder of the flock with many showing obvious emaciation. Examination of the collected daily mortality confirmed vent peck with evisceration.

The atmosphere in the house was extremely dusty consistent with flurries of bird movement.

By the time of the evaluation, production had returned to standard and the weekly losses had stabilized at 0.5% since week 50. Given that these were organic flocks with a potential contribution margin (revenue minus direct costs) of approximately \$1 per dozen, losses to 60 weeks amounted to \$32,000. It is estimated that by week 75 depletion, given the projected mortality, suboptimal egg production and low case weight cumulative losses of eggs on a hen-housed basis would amount to 30 eggs per hen. This would represent a potential loss of \$75,000 for the two flocks.



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PRODUCTNEWS

Prinzen farm packer



Prinzen of Holland has introduced an egg handling system comprising the Prinzen Speed Pack 110 linked to the Prinzen PS-Four-Tray Stacker which will function at 111 cases per hour. This corresponds to a farm holding approximately 300,000 hens given six hours of operation. The system can be operated from a central touch-screen display located at the packer infeed.

www.prinzen.com

Sullair compressor range



Sullair Corporation has announced a redesign of their compressors incorporating patented single-stage rotary screw technology. Models are available with either constant speed or variable speed drive.

www.sullair.com

Lohmann Animal Health vaccine

A live vaccine for the control of New-castle disease is available from Lohmann

Animal Health. Known as AviPro ND C131 and suitable for broilers, layers and breeders, it is produced from a cloned strain of the La Sota virus. AviPro ND C131 has received European registration and is licensed for use on chicks from 14



days old. It can be administered through the drinking water, via spray or by eyedrop. For commercial layers, it is possible to re-vaccinate during the laying period. The vaccine is available in packs of 1000, 2500, 5000 and 10,000 doses.

www.lah.de



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Ronozyme NP is an enhanced phytase from DSM Nutritional Products designed for consistent phosphorus release to meet the demands of modern animal production systems. Ronozyme NP also increases the availability of other phytate nutrients in pig and poultry feeds, along with such minerals as calcium and magnesium, while maintaining its heat-stable form.

www.dsm.com

Petersime incubator



Petersime incubators include a tailored documentation box available in 11 languages, including Turkish. The resource guide, part of the "24/7 Access to Service Station" service pack, features 600 pages of user information

categorized by topic. By providing serial numbers, complete technical files are available for models dating back 30 years.

www.petersime.com



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Diamond Moba Americas is a sales, service and support organization for the egg grading and packing industry in North and South America. It represents two innovative and leading brands of equipment: Diamond and Moba.



Product News

Celsius egg shell dryer

The Egg Shell Dryer from Celsius is part of a continuous industrial process during which the shells of recently broken eggs are heated and dried. The machine is based on a screw heat exchanger that is heated by thermal oil. The system also uses a pulverizer, a heating unit and an exhaust system to remove moisture. The



end product is sterilized by the heat, less than 1% moisture and valuable as a source of lime. Three models are offered, with a maxi-

mum capacity of 500, 1000 or 1500kg egg shells/hour. Each has been designed

for low energy consumption and to take up minimum space.

www.celsius.nl

Orka upgraded egg analyzer

Orka Food Technology of Israel released version 3.0 of EggAnalyzer which offers faster operation time and improved accuracy. The Unit will determine the egg's weight, yolk color, albumen height, and automatically calculates the Haugh unit and USDA grade in 17 seconds.

www.eggtester.com

Jansen manure belt system



Jansen Poultry Equipment of Holland has introduced a manure belt system designed for slatted-floor housing. The belt can be rewound on an electrically driven drum to allow cleaning of the house floor beneath the belt. Continuous plastic manure belts must be completely removed if the under-surface is to be cleaned following depopulation of a flock.

www.jpe.org

J&D Ceiling fan



The J&D Indoor/Outdoor Ceiling Fan is UL/CUL Certified for outdoor and agricultural use. It has passed all UL/CUL water spray and corrosion tests. The fan has forward and reverse operations to provide upward or downward airflow. The 60-inch ceiling fan has a sealed motor and housing and a limited lifetime warranty.

www.jdmfg.com

Vencomatic egg cargo system

Vencomatic offers the Twin Pack Egg Cargo System which comprises trays, pallets and dividers. The stable and reusable components offer advantages over conventional wooden pallets and ply dividers. All components can be decontaminated and carry a seven-year warranty.

www.vencomatic.ca

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RESCHEDULED TO: THURSDAY 25 MARCH 2010

03.00 hrs to 18.00 hrs CDT (-6 GMT)

Sign Up & Learn More at: www.WATTevents.com

If you signed up to attend the November 2009 event you DO NOT have to sign up again.

5, FREE to Attend, Online Presentations + Live Q&A Sessions for Poultry Nutrition & Health Professionals

After a resounding success at the 1st ever virtual forum in animal agribusiness history, WATT Media announces the 2nd virtual forum...this one focused exclusively on poultry nutrition and health.

What have past attendees said about WATT virtual forums?

"I thought the Online Animal Nutrition forum was very well attended and very well executed."

"This was my first year attending the online forum show and will do so annually now."

WHAT IS AN "ONLINE FORUM"?

 A one-day educational event for global poultry nutrition and health professionals held in a "virtual environment" on the internet.
 Attendees need not be present the entire day – enter and leave the event as your schedule allows.

WHO SHOULD ATTEND?

 Poultry nutritionists, veterinarians, production/husbandry managers, technical consultants and manufacturers of poultry nutrition and health products.

WHY ATTEND?

- Educational and networking opportunity with peers from around the world.
- Panel and individual presentations on the latest issues impacting poultry nutrition and health.
- Live question and answer sessions with top industry experts.
- Ability to visit "virtual booths" and communicate with poultry nutrition and health solution providers.
- FREE to attend and you can log-in from the comfort of your office or home.
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FEATURED PRESENTATION:

The 'Welfare' Trap: Impact on Gut Health, Leg Problems, and More

An international panel examines the animal welfare movement's impact on housing, veterinary care and the consequences for flock nutrition, health and performance. The panel will discuss the cage layer controversy, leg problems, gut health and how the elimination of sub-therapeutic levels of antimicrobials is leading to more disease and drug usage in many parts of the world.

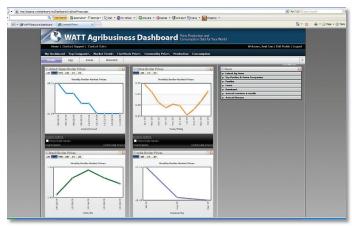
TAKE THE "VIRTUAL TOUR" AT WWW.WATTEVENTS.COM



INDUSTRYNEWS

WATT launches agribusiness data resource

Are you tired of searching through dozens of Web sites to find the livestock and commodity price information you need to make your business decisions?



WATT Agribusiness Dashboard is a subscription-based Web site that provides price, production and consumption data and news about the global Poultry, Swine and Animal Feed industries. Displayed in easy-to-view charts, this information helps executives, commodity buyers, product managers, R&D personnel, public relations

staff and sales professionals make business decisions with confidence.

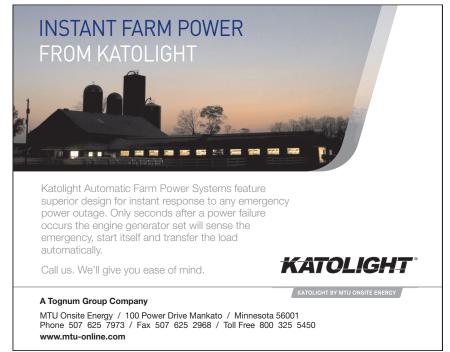
Fully customizable, this powerful tool allows access to up-to-date news and producer prices for feed commodities poultry, egg and swine, in markets

including United States, European Union, Brazil, China, India and Russia. Data charts can easily be exported to .csv, .txt or .jpg formats.

The WATT Agribusiness Dashboard allows subscribers to make business decisions accu-

rately and quickly. Subscribers can reduce their research costs by eliminating the need to pour over dozens of Web sites to indentify commodity market trends and industry news. The subscription can be purchased month-to-month, semi-annually and annually.

➤ For more information, go to www.wattdashboard.com



See us at the IPE-IFE, booth 1417

Editorial changes announced

WATT has reorganized the content departments of its International and Feed magazines, effective with the January 2010 issues.

Dr. Simon M. Shane has been named editor of *Feed Management*. Dr. Shane is



Simon Shane

a retired professor from the Department of Epidemiology and Community Health, School of Veterinary Medicine, Louisiana State University, where he was involved in teaching, research and service relating

to poultry from 1979 through 2001. He currently holds courtesy appointments as an adjunct professor in the departments of Poultry Science and the College of Veterinary Medicine, North Carolina State University. He has served as the editor of *Egg Industry* since July 2008.

Dr. Shane works out of his North Carolina office, and will be supported by Sue Roberts, who serves as managing editor of *Feed Management* and *Egg Industry*.

Mark Clements, who has served as edi-



Mark Clements

tor of *Poultry Inter*national since September 2008, has been named editor of *Feed Internation*al and *Pig Interna*tional. Clements is a seasoned journalist with more than 14 years experience working in the agri-

cultural press and public relations at the international level. Before joining WATT he edited international food and animal health magazines and newsletters.

Clements is based in London, and will be supported in WATT's Rockford, Ill., U.S. headquarters by Kathleen McLaughlin, who has been named managing editor of *Feed International*, *Pig International* and *Poultry International*.

New technology extends egg product life

Savano has introduced post-pasteurizing modules applying wave technology for extended life products. The new application can achieve high levels of bacterial inactivation compared to traditional pasteurization.

An added advantage is that the functional properties of eggs are not impaired. Wave technology exposes egg liquid to an electromagnetic force which produces an electric field. Rapid reversal in the electric field polarity generates kinetic energy, which is expressed as a heating effect. Intermolecular friction inactivates bacteria without affecting the inherent beneficial properties of egg liquid since the process is carried out at sub-coagulation temperatures.

The technology has been tested under commercial conditions in the EU. Products processed with Sanovo wave technology tested 17 weeks after processing show a total plate count less than 10 CFM per gram.

Rose Acre buys Crystal Farms

Rose Acre Farms of Seymour, Ind., has purchased the shell egg business of Crystal Farms, Chestnut Mountain, Ga.

The acquisition includes 2.5 million laying hens and related production and processing facilities, equipment and inventory.

Petersime expands into Brazil



Petersime, the Belgium-based specialist in incubators and hatcheries, announced the opening of a new subsidiary, Petersime do Brasil Incubadoras e Incubatory Ltda., in Criciúma, Santa Catarina, Brazil.

Petersime do Brasil will be the company's key point of contact for all of Latin America. The new setup includes engineers fluent in Portuguese and Spanish, and a warehouse to allow quicker delivery of spare parts to businesses in Latin America.

Chore-Time names product manager for controls

Bob Christenson has been promoted to product manager for controls for Chore-Time's Egg Production Systems business unit. Christenson will oversee development of Chore-Time's Chore-Tronics line of climate and whole house controls as well as complemen-



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Industry News



tary software, scale systems and other products related to the control and monitoring of poultry house equipment and the analysis and reporting of

house performance data.

Christenson began his career at Chore-Time in 1998 as a technical service representative and most recently served as a product specialist for the controls line.

Scottish Egg Quality Award winners chosen

Two husband-and-wife teams have tied for top honors in this year's Scottish Egg Quality Awards. The winners were Jim and Anne Smillie of Corrie Mains Farm in Ayrshire and John and Elaine Dalrymple of Auchtralure Farm in Dumfries.

Judging involved quality assessments of eight key factors: shell color, egg weight, yolk color, albumen quality, shell thickness, freedom from meat and blood spots, external appearance and packaging. Entries came from both conventional cage and free-range sys-



From left: Jim and Annie Smillie, Elaine and John Dalrymple.

tems of egg production.

The competition, now in its second decade, is sponsored by the Scottish Agricultural College and feed manufacturer BOCM Pauls. Twenty-seven producers entered this year's competition.

> MARKETPLACE

Ad sizes start at one column by one inch and can be any size up to six column inches. Logos and photographs are acceptable. Add color for an additional \$30 per color per insertion. The rate for EGG INDUSTRY is \$120 per inch per insertion (1-time rate), \$110 per inch per insertion (6-time rate), and \$100 per inch per insertion (12-time rate). The production charge is included except for ads with excessive make-up demands.

For more information on how to place your ad, contact:

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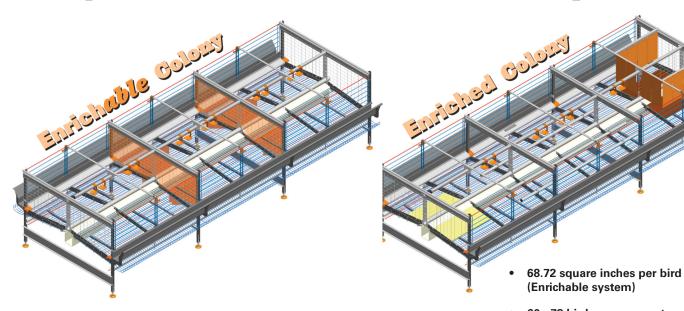
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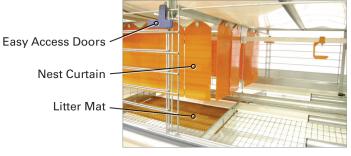


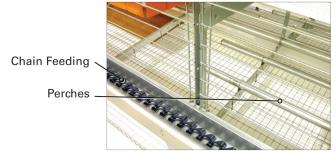
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