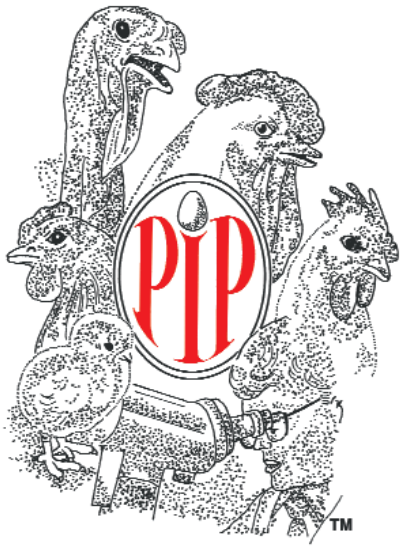

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Editor: Charles Hofacre, Associate Professor, Department of Avian Medicine

Phone (706) 542-5645 Fax (706) 542-5630
e-mail: sclanton@arches.uga.edu

THE 37TH NATIONAL MEETING ON POULTRY, HEALTH AND PROCESSING WAS HELD OCTOBER 9-11, 2002 IN OCEAN CITY, MARYLAND. THE FOLLOWING SUMMARIES WERE PREPARED BY MAM CANDIDATES AT THE UNIVERSITY OF GEORGIA.

Broiler Performance Data (Region)
Live Production Cost

	SW	Midwest	Southeast	Mid-Atlantic	S-Central
Feed cost/ton w/o color ($)	147.36	134.62	150.99	152.45	144.50
Feed cost/lb meat (¢)	13.52	12.24	13.66	14.75	13.34
Days to 4.6 lbs	43	43	43	43	44
Chick cost/lb (¢)	3.80	3.89	3.90	3.43	4.10
Vac-Med cost/lb (¢)	0.04	0.02	0.07	0.05	0.06
WB & 1/2 parts condemn. cost/lb	0.18	0.23	0.14	0.19	0.20
% mortality	3.63	3.24	3.40	4.29	3.97
Sq. Ft. @ placement	0.84	0.79	0.81	0.84	0.81
Lbs./Sq. Ft.	6.52	6.79	6.53	7.22	6.24
Down time (days)	15	15	14	15	16

Data for week ending 11/02/02

Contents

Poultry Health Impact on Food Safety

Dr. Scott Russell
Department of Poultry Science,
University of Georgia

Dr. Russell stated that published literature had determined the effect of *E. coli* respiratory infections on body weight and carcass contamination. Previous studies determined that *E. coli* infections had a negative impact on body weight, and resulted in significantly higher levels of *E. coli* and Salmonella contamination when affected (re-hung) birds were sampled.

This study sampled birds from airsacculitis positive and airsacculitis negative flocks, as differentiated by USDA inspector hang-back sheets and questioning live production personnel for suspect flocks. The sampled birds were evaluated for carcass weights and uniformity, fecal contamination, processing errors, and microbiological contamination.

As expected, airsacculitis positive flocks have reduced body weights and poor uniformity. Airsacculitis positive flocks were also found to have higher levels of fecal contamination than negative flocks. Additionally, airsacculitis positive flocks had significantly higher levels of processing errors such as proventricular tears and intestinal cuts. These findings are most likely due to the poor uniformity within and between flocks resulting in greater errors by the processing machinery. A relationship between airsacculitis positive flocks and higher Campylobacter levels was also found. Dr. Russell stated this work places greater emphasis on prevention and treatment of broilers with airsacculitis especially with the USDA emphasis on microbial food safety.

Scott Gustin, DVM
MAM Candidate

Salmonella Control in Broiler Processing

Dr. Mark LaVorgna
Perdue Farms, Inc.

Dr. LaVorgna discussed regulations and intervention strategies involving Salmonella control in processing plants. In 1998, USDA data showed that 10.8% of Salmonella Performance sets were positive and that 90.8% of plants were in compliance with the standards. In 2001, USDA data showed improvement with the percentage of positive sets decreasing to 9.7% and compliance increasing to 94.0%. Data from Salmonella serotyping demonstrated that there is some disagreement between the prevalence of serotypes isolated

Broiler Whole Bird Condemnation (Region)

	SW	Mid-West	S. East	Mid-Atlantic	S. Central
% Septox	0.172	0.372	0.171	0.260	0.280
% Airsac	0.056	0.106	0.093	0.081	0.082
% I.P.	0.065	0.050	0.041	0.026	0.049
% Leukosis	0.001	0.003	0.001	0.009	0.004
% Bruise	0.010	0.015	0.009	0.009	0.007
% Other	0.012	0.007	0.024	0.008	0.033
% Total	0.317	0.553	0.340	0.392	0.456
% 1/2 parts condemnations	0.506	0.497	0.296	0.479	0.362

Data for week ending 11/02/02

Broiler Performance Data (Company)
Live Production Cost

	Average Co.	Top 25%
Feed cost/ton w/o color ($)	147.85	139.25
Feed cost/lb meat (¢)	13.54	12.23
Days to 4.6 lbs	43	42
Chick cost/lb (¢)	3.97	3.73
Vac-Med cost/lb (¢)	0.05	0.05
WB & 1/2 parts condemn. cost/lb	0.18	0.13
% mortality	3.72	2.96
Sq. Ft. @ placement	0.81	0.78
Lbs./Sq. Ft.	6.50	6.13
Down time (days)	15	17

Data for week ending 11/02/02

from broiler carcasses and human isolates. For example, Salmonella serotype Kentucky represents only 0.1% of human isolates even though it represents 17.0% of isolates found on broiler carcasses.

The presentation followed with asking the questions, "What is the value for Salmonella control for companies, customers, and consumers?" and if a value can be assigned for decreasing Salmonella prevalence. Some of the control options discussed were determining incoming Salmonella loads to the plant, determining the sources, and creating interventions. To determine the incoming loads, Dr. LaVorgna suggested whole bird feather rinses and cecal samples. It is also important to determine the incidence or rate of positive carcasses and the load (or CFU's/sample) that is being carried by each carcass. It was also stressed that rainy days can greatly increase Salmonella prevalence. Segregation of "hot" or Salmonella positive breeder flock eggs at the hatchery and broiler flocks can be effective in reducing cross contamination of flocks. Serotyping can also aid in determining the source of Salmonella found on post-chill carcass rinses. He has found that serotypes Heidelberg, Kentucky, Hadar, and Typhimurium are good colonizers of broilers while serotypes Senftenberg, Worthington, and Mbandaka are commonly associated with feedstuffs. Other interventions involve management of bird re-hanging, scalder pH (~9.0 best), and chiller pH (6.0-6.5 pH for effective chlorine activity). Other areas of control that integrators may want to consider are vaccination of broilers and breeders, broiler drinking water acidification, and new antimicrobial carcass sprays.

Scott Gustin, DVM
MAM Candidate

Antibiotic Use and Food Safety in Europe

George Tice, BVSc MMed Vet MRCVS
Elanco Animal Health

The current situation regarding use of antibiotic growth promoters (AGP) in the European Union (EU) and consequences of the ban were discussed. The decision of the European Council of Agriculture Ministers to ban the use of four AGP's began on July 1999. Zinc bacitracin, spiramycin, virginiamycin and tylosin phosphate were not available as growth promoters, but the therapeutic or treatment use of those products was not affected. Dr. Tice stated this was a political move and not based on science.

The consumers, after the series of food scares in the media about *S. enteritidis* in eggs, BSE and dioxin contamination of eggs and meat, became extremely sensitive to the issue of food safety. At the market in the U.K., several retailers that dominate the selling of food and have a strategy of carrying their own branded chicken products wanted to remove the risk of their brandname being the focus of any new negative media attention. They began an industry-wide initiative, Assured Chicken Production. These voluntary standards applied to both domestic production and imports. Among other measures, the industry decided to withdraw the use of all AGPs, even those that are not banned by the "feed additive directive." Their rationale for this decision was based on the view that the remaining AGPs would be withdrawn in a matter of months and also perhaps they could market domestic products as AGP free to fight against imported chicken. It was also believed the industry had satisfactory alternatives to replace the AGPs. However, the UK companies have been unable to differentiate their products on the basis of non-use of AGPs and imports have continued to rise. Although many alternative products and management changes have been investigated, there has still been a significant increase in the number of enteric disorders. Three diseases dominate: necrotic enteritis and cholangiohepatitis and a non-specific bacterial enteritis. Dr. Tice confirmed that increased disease has led to increased use of therapeutic antibiotics.

Darko Mitevski, DVM
MAM Candidate

Human Health Risk from Use of Virginiamycin in Chickens

Kenneth Bafundo, Phibro Animal Health
Louis Anthony Cox, Cox Associates

Dr. Bafundo stated that the normal flora *Enterococcus faecium* in healthy persons could develop into serious life-threatening infection in patients typically sufferering from a compromised immune system. The drug of choice in these cases would be vancomycin with a newer product Quinupristin-Dalfopristin (QD), marketed as Synercid™ (combination of streptogramin antibiotics) used to treat patients with vancomycin resistant *E. faecium* (VRE) infections. Another streptogramin antibiotic, virginiamycin (VM), has been used as a growth promoter and therapeutic drug in farm animals in the U.S. and other countries for more than 20 years. Poultry in the U.S. do test positive for QD resistant *E. faecium*, raising the theoretical possibility that use of virginiamycin in chickens may compromise QD effectiveness in treating human VRE infections. At present such transfer remains an unquantified theoretical possibility. Dr. Bafundo discussed the development of a risk estimate for the human health impacts of VM use in chickens and also for the potential human health benefits of banning the product from veterinary use.

The risk estimate is based on the strategy to start with QD-resistant VRE patients and to quantify the maximum proportion of cases that could have been caused by VM use in chickens. VM-attributable treatment failure was defined to occur whenever a patient (1) has VRE infection that (2) is resistant to QD and (3) could have come from chicken (e.g. is of the *E. faecium* type found in chickens) and (4) the patient is prescribed QD but (5) QD therapy fails due to QD-resistance of the strain. Although at present transfer of QD resistance from VM-treated chickens to VRE-infected humans has not been establish as a fact the authors assume that the transfer does occur. To determine the maximum proportion of cases attributable to chickens, 255 VRE strains isolated from hospitalized patients, non-hospitalized persons and various animal sources in 9 different countries were analyzed by amplified-fragment length polymorphism. Four major genogroups were established (A-D). Isolates of all genogroups were present in human patients while genogroup B was the predominant from the chicken isolates. Therefore, if it is assumed that all of these genogroup B isolates of VRE in humans are from chickens that would mean at most only 10/87 VRE hospitalized humans are from chickens. Resistance to QD of VRE isolates is low (around 1%). In addition, there is a new drug of choice for VRE treatment called linezolid. A model for the human health impact of a ban on VM used the assumption that reductions in the QD resistance rate in VRE in human patients is proportional to reductions in VM resistance rate in food animals. The data used in the model was from Denmark where VM was banned in food animal feed in 1998. The data on adverse human health consequences of QD treatment failures (excess illness days and mortality) shows that immediately banning VM use in chickens would save 6.3 lives over the next 5 years in the entire U.S.A.

Darko Mitevski, DVM
MAM Candidate

Broiler Whole Bird Condemnation (Company)

	Average Co.	Top 25%
% Septox	0.239	0.219
% Airsac	0.081	0.074
% I.P.	0.047	0.062
% Leukosis	0.004	0.003
% Bruise	0.009	0.011
% Other	0.016	0.009
% Total	0.397	0.377
% 1/2 parts condemnations	0.411	0.214

Data for week ending 11/02/02

Dr. Susan M. Williams has been appointed instructor in The University of Georgia's College of Veterinary Medicine, Department of Avian Medicine according to an announcement by Dr. Stan Kleven.

Williams received her B.S. from the University of California, Davis; D.V.M. from Tuskegee University and Ph.D from Michigan State University.

Prior to joining The University of Georgia, Williams was an Anatomic Pathology Specialist in the Animal Health Diagnostic Laboratory at Michigan State University. Dr. Williams has co-authored various journal articles and many published abstracts for presentations.

Reminder

All previous issues of the Poultry Informed Professional are archived on our website www.avian.uga.edu under the Online Documents and The Poultry Informed Professional links.

For Your Information

Bayer has launced a website that will keep you informed of the Notice of Opportunity of Hearing proceedings with FDA to withdraw Baytril from the U.S. market. The site gives the science behind Bayer's defence of Baytril as a tool in poultry production. It will be continually up-dated. The address is www.healthypoultry.com

Bayer

The Poultry Informed Professional Newsletter is published with support from Bayer Corporation

Excerpts from the latest USDA National Agricultural Statistics Service (NASS) "Broiler Hatchery," "Chicken and Eggs" and "Turkey Hatchery" Reports and Economic Research Service (ERS) "Livestock, Dairy and Poultry Situation Outlook" Reports

Broiler Eggs Set in 19 Selected States Down 3 Percent

According to the latest National Agricultural Statistics Service (NASS) reports, commercial hatcheries in the 19-State weekly program set 199 million eggs in incubators during the week ending November 9, 2002. This was down 3 percent from the eggs set the corresponding week a year earlier. Average hatchability for chicks hatched during the week was 83 percent. Average hatchability is calculated by dividing chicks hatched during the week by eggs set three weeks earlier.

Broiler Chicks Placed Down 2 Percent

Broiler growers in the 19-State weekly program placed 151 million chicks for meat production during the week ending November 9, 2002. Placements were down 2 percent from the comparable week in 2001. Cumulative placements from December 30, 2001 through November 9, 2002 were 7.53 billion.

September Egg Production Up 1 Percent

U.S. egg production totaled 7.15 billion during September 2002, up 1 percent from last year. Production included 6.10 billion table eggs and 1.05 billion hatching eggs, of which 989 million were broiler-type and 56.0 million were egg-type. The total number of layers during September 2002 averaged 337 million, up 1 percent from a year earlier. September egg production per 100 layers was 2,119 eggs, up 1 percent from the 2,103 eggs in September 2001.

All layers in the U.S. on October 1, 2002, totaled 338 million, up slightly from a year ago. The 338 million layers consisted of 280 million layers producing table or commercial type eggs, 54.9 million layers producing broiler-type hatching eggs, and 2.45 million layers producing egg-type hatching eggs. Rate of lay per day on October 1, 2002, averaged 70.2 eggs per 100 layers, up slightly from a year ago.

Laying flocks in the 30 major egg producing States produced 6.69 billion eggs during September 2002, up 1 percent from a year ago. The average number of layers during September, at 316 million, was up slightly from a year ago.

Egg-Type Chicks Hatched Down 4 Percent

Egg-type chicks hatched during September totaled 35.4 million, down 4 percent from September 2001. Eggs in incubators totaled 30.8 million on October 1, 2002, down 3 percent from a year ago.

Domestic placements of egg-type pullet chicks for future hatchery supply flocks by leading breeders totaled 259,000 during September 2002, up 18 percent from September 2001.

Broiler Hatch Up Slightly

The September 2002 hatch of broiler-type chicks, at 741 million, was up slightly from September of the previous year. There were 591 million eggs in incubators on October 1, 2002, down 4 percent from a year earlier.

Leading breeders placed 6.7 million broiler-type pullet chicks for future domestic hatchery supply flocks during September 2002, up 1 percent from September 2001.

Turkey Eggs in Incubators on November 1 Down 2 Percent

Turkey eggs in incubators on November 1, 2002, in the United States totaled 29.9 million, down 2 percent from November 1 a year ago. Eggs in incubators were 2 percent above the October 1 total of 29.2 million. Regional changes from the previous year were: East North Central, down 2 percent; West North Central, down slightly; North and South Atlantic, down 3 percent; South Central, down 12 percent; and West, up 2 percent.

Poults Placed During October Down 1 Percent From Last Year

The 23.8 million poults placed during October 2002 in the United States were down 1 percent from the number placed during the same month a year ago. Placements were up 5 percent from the September 2002 total of 22.7 million. Regional changes from the previous year were: East North Central, up 2 percent; West North Central, up 9 percent; North and South Atlantic, down 8 percent; South Central, down 20 percent; and West, down 4 percent.

Quarterly Broiler Consumption Tops 20 Pounds

According to the latest Economic Research Service (ERS) reports, third-Quarter Broiler Production Forecast at 8.225 Billion Pounds With an expected 2-to 3-percent increase in the number of broilers slaughtered and an expected 2-to 2.5-percent increase in the average live weight per bird, broiler production in third-quarter 2002 is estimated at 8.225 billion pounds, 4.3 percent higher than in 2001. With higher domestic production and numerous disruptions in the export markets, more broiler meat has been available for the domestic market. This has led to record levels of consumption, but to sell this record amount of broiler meat has generally required lower prices. During the third-quarter of 2002, the 12-City whole bird price averaged 56.4 cents a pound, down almost 8 percent from the same period in 2001. Prices were even more depressed for leg meat. The average price for drumsticks and thighs in the third quarter in the Southern region were 36.2 and 37.4 cents a pound. This is a 31-percent decline for drumsticks and a 23-percent decline for thighs compared with a year earlier. However, not all prices were lower, breast meat in the Southern region averaged 83.4 cents a pound in the third quarter, a 7-percent increase from the previous year.

Recently, the impacts of low prices for most broiler products have started to be reflected in the number of broiler-type eggs going into incubators. Over the last 5 weeks, (September 14 to October 12) the average number of eggs placed in incubators has been down 3.9 percent from the previous year. Additionally, in the last 2 weeks, egg placements have been 4.2 percent below a year earlier. The normal time span from eggs being placed in incubators to a broiler reaching processing size is 9 to 10 weeks. Thus, eggs placed in incubators towards the beginning of October will have been hatched and grown out to processing size at the beginning of December. This slowdown in egg placements is expected to result in slower growth in broiler output in the fourth quarter, which is expected to be slightly over 8 billion pounds, only 2.1 percent higher than the previous year.

Broiler Exports Forecast Lower

Broiler exports for the third quarter of 2002 are estimated at 1.16 billion pounds, down 13 percent from 2001. While the decline stems from a number of factors, the chief reasons have been continued disease outbreaks in various areas in the United States and the slowdown of exports to Russia due to a trade dispute involving disease, sanitary regulations, and reporting requirements. Exports to Russia are down 29 percent over the first 7 months of 2002. However, during June and July while the trade embargo with Russia was supposed to be in place, trade data show 309 million pounds of broiler products going from the United States to Russia. Countries such as Japan, Korea, and Mexico have all had complete or partial bans on U.S. poultry products at various times this year. The bans have been in reaction to outbreaks of avian influenza, the most recent in turkey flocks in California. There has also been a reported outbreak of newcastle disease in California in game bird flocks (not broilers or turkeys). While the bans have reduced exports to Japan (down 58 percent through July), exports to Mexico and Korea are actually 3 and 30 percent higher than during the same period in 2001.

With the apparent resolution of the trade disagreement with Russia, broiler exports are expected to gradually increase, but still remain below the quantities exported in the fourth quarter of 2001. If no further disease outbreaks occur, exports to Japan and Korea are also expected to strengthen in the coming months.

Turkey Stocks High Entering Holiday Period

Entering into the holiday period, stocks of whole birds are slightly higher than the previous year and prices are somewhat lower than in 2001. Over the first 8 months of 2002, U.S. turkey production totaled 3.8 billion pounds, 3 percent higher than during the same period in 2001. This increase in production coupled with lower exports through July (down 4 percent) and flat domestic consumption have resulted in growing stocks of whole birds and turkey parts. At the beginning of September turkey stocks were 682 million pounds, 25 percent higher than the previous year. Stocks of whole turkeys had been 8 percent higher than the previous year at the start of August, but during the month stocks were drawn down, so at the beginning of September they were 344 million pounds, only 1.5 percent higher than the previous year. The slowdown in exports has had a greater impact on turkey parts. At the beginning of September, stocks of turkey parts were 377 million pounds, 64 percent higher than a year earlier. Although stocks of whole turkeys at the beginning of September are now about the same as a year earlier, prices for whole birds continued to remain lower than the previous year. In September, whole hen prices in the Eastern region were 67.2 cents a pound, down 2 percent from a year earlier. Whole bird prices are expected to increase seasonally over the next 2 months, and hen prices in the Eastern region are expected to average marginally higher in the fourth quarter compared with the previous year.

Meetings, Seminars and Conventions

2002 November

Nov 26-29: ***EXPOAVIGA 2002,*** Mantjuic 2 Trade Fair Centre, Barcelona, Spain, Contact: Fira de Barcelona. Phone: 34-932-332-358.

2002 December

Dec. 4-5: ***Listeria Workshop,*** Hilton Cincinnati Netherland Plaza, Cincinnati, Ohio. Contact: Katie Branan, American Meat Institute Foundation, 1700 N. Moore St., Suite 1600, Arlington, VA 22209. Phone: 703-841-2400; kbrannan@meatami.com

2003 January

January 22-24: ***International Poultry Exposition,*** Georgia World Congress Center, Atlanta, GA. Contact: U.S. Poultry and Egg Associaion, 1530 Cooledge Road, Tucker, GA 30084. Phone: 770-493-9401; Fax: 770-493-9527

2003 February

February 6-8: ***NTF Annual Convention,*** San Antonio, Texas. Contact: National Turkey Federation, 1225 New York Ave., S.W., Suite 400, Washington, D.C. 20004. Phone 202-898-0100; http://www.eatturkey.com

February 24-27: ***PEPA Annual Convention,*** Palm Springs, Calif. Contact: Pacific Egg & Poultry Association, 1521 I St., Sacramento, Calif. 95814. Phone 916-441-0801; http://www.pacificegg.org

2003 March

March 5-6: ***Nebraska Poultry Industries Annual Convention,*** New World Inn and Conference Center, Columbus, Nebraska. Contact: Nebraska Poultry Industries, Inc., University of Nebraska, A-103 Animal Sciences, P.O. box 830908, Lincoln, NE 68583-0908. Phone: 402-472-2051

March 5-6: ***U.S. Poultry Environmental Management Seminar,*** Raleigh Marriott Crabtree Valley Hotel, Raleigh, N.C. Contact: U.S. Poultry & Egg Association, 1530 Cooledge Road, Tucker, GA 30084-7303. Phone 770-493-9401; http://www.poultryegg.org

March 5-7: ***VIV Asia,*** Queen Sirikit National Convention Center, Bangkok, Thailand. Contact: Jaarbeurs Exhibitions and Media. P.O. Box 8500, 3503 RM Utrecht, The Netherlands. Phone: +31 30 295 5662; Fax: +31 30 295 5709 or email: viv.asia@jaarbeursutrecht.nl

March 8: ***ACPV Sponsored Workshop, Molecular Biology Made Easy,*** Contact: H.L. Shivaprasad, 2789 S. Orange Ave., Fresno, CA 93725.

March 9-11: ***52nd Western Poultry Disease Conference,*** Capitol Plaza Holiday Inn, Sacramento,CA. Contact: R.P. Chin, 2789 S. Orange, Ave., Fresno, CA 93725

March 18-20: ***MPF Conference,*** RiverCentre, St. Paul, Minn. Contact: Midwest Poultry Federation, 108 Marty Drive, Buffalo, Minn. 55313. Phone: 763-682-2171; http://www.midwestpoultry.com

March 19-20: ***U.S. Poultry Feed Mill Management,*** DoubleTree Hotel, Nashville, TN. Contact: U.S. Poultry & Egg Association, 1530 Cooledge Road, Tucker, GA 30084-7303. Phone 770-493-9401; http://www.poultryegg.org

2003 April

April 4-5: ***Florida Poultry Days,*** Orlando, FL. Contact: Florida Poultry Association, 4508 Oak Fair Blvd., No. 290, Tampa, FL 33601

April 20-23: ***Middle East Poultry Show,*** Dubai World Trade Center Exhibition Complex, United Arab Emirates. Contact: Mediac Communication and Promotion, P.O. Box 5196, Dubai, UAE. Phone: +971 4 2692004; Fax: +971 4 2691298

2003 May

May 1-4: ***GPF Annual Meeting,*** Brasstown Valley Resort, Young Harris, GA. Contact: Georgia Poultry Federation, P.O. Box 763, Gainsville, GA 30503. Phone: 770-532-0473; claudette@gapf.org

May 8-9: ***U.S. Poultry Nationial Breeders Roundtable,*** Airport Marriott Hotel, St. Louis, MO. Contact: U.S. Poultry & Egg Association, 1530 Cooledge Road, Tucker, GA 30084-7303. Phone: 770-493-9401; http://www.poultryegg.org

May 14-15: ***U.S. Poultry Processor Workshop,*** DoubleTree Hotel, Nashville, TN. Contact: U.S. Poultry & Egg Association, 1530 Cooledge Road, Tucker, GA 30084-7303. Phone: 770-493-9401; http://www.poultryegg.org

May 17: ***GPF Night of Knights,*** Cobb Galleria Centre, Atlanta, GA. Contact: Georgia Poultry Federation, P.O. Box 763, Gainsville, GA 30503. Phone: 770-532-0473; claudette@gapf.org

May 29-31: ***Chicken Cooking Contest,*** Baltimore Convention Center, Baltimore, MD. Contact: National Chicken Council, 1015 15th St., N.W., Suite 930, Washington, DC 20005-2625. Phone: 202-296-2622

2003 June

June 5-7: ***VIV Poultry Yutav,*** World Trade Center Yesulsky, Istanbul, Turkey. Contact: Jaabeurs Exhibitions and Media, P.O. Box 8800, 3503 RM Utrecht, The Netherlands. Phone: +31 30 295 2772; Fax: +31 30 295 2809

June 25-27: ***Georgia Egg Association's 42nd Annual Meeting,*** King & Prince Hotel, St. Simons Island, GA. Contact: Robert Howell, Georgia Egg Commission, 16 Forest Park, GA 30297. Phone: 404-363-7661; Fax: 404-363-7664 or email: goodeggs@bellsouth.net

2003 July

July 19-23: ***XIII Congress of the World Veterinary Poultry Association,*** Denver, CO, USA. Contact: Details are posted on the web site of the American Association of Avian Pathologists. Website: http://www.avian.uga.edu/~wvpa/

2003 September

Sept 23-26: ***XVI European Symposium on the Quality of Poultry Meat & European Symposium on the Quality of Eggs and Egg Products,*** Saint-Brieve, Brittany, France. Contact: ISPAIA, Zoopole Development, BP7-22400 Ploufragen, France. Phone: +47 22 79 87 72, Fax: +47 22 79 87 71. Email: wpsa2003@zoopole2550.fr

2003 October

Oct. 11-15: ***Anuga Food Show,*** KslnMesse, Cologne, Germany. Contact: KslnMesse, GmbH, Messeplatz 1, D-50679 Klsn, Germany. Phone: +49 821 33 05; Fax: +49 821 34 10. Email: m.schlveter@koeln-messe.de