



The Poultry Informed Professional



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Thoughts from Dr. Kleven...

We hope you will enjoy and utilize the *Poultry Informed Professional* newsletter. Our intent is to provide timely and pertinent information to professionals involved in poultry production, especially those involved in poultry health. We hope to be able

to publish this newsletter monthly via fax. Eventually we hope to have all current and past issues available on the World Wide Web.

Our wish is to keep this an open forum. We welcome pertinent contributions from anyone in the form of short articles, announcements, job opportunities and the like. Such submissions will be essential to the long term viability of the newsletter; we will not be able to sustain it without outside contributors.

This project is something that we have anticipated for some time. The sponsorship by the Bayer Poultry Business Unit has now made it possible, and we thank them for their support. We must make it clear, however, that this does not imply our endorsement of the Bayer Company or its products. In fact, we welcome articles, announcements, and other submissions from anyone, even from competitors of the Bayer Company.

We are looking forward to receiving your comments, suggestions and submissions.

**Broiler Performance Data (Region)
Live Production Cost**

	SW	Midwest	Southeast	Mid-Atlantic	S-Central
Feed cost/ton w/o color	191.24	187.67	200.75	195.61	198.72
Feed cost/lb meat	18.78	17.64	19.54	19.98	20.29
Days to 4.6 lbs	46	45	45	45	45
Med. cost/ton	4.39	4.04	4.32	3.41	3.99
Chick cost/lb	4.16	4.56	4.29	4.17	3.99
Vac-Med cost/lb	0.11	0.07	0.10	0.15	0.10
WB & 1/2 parts condemn. cost/lb.	0.30	0.35	0.23	0.35	0.36
% mortality	4.49	4.92	4.09	5.19	5.38
Sq. Ft. @ placement	0.76	0.71	0.76	0.74	0.80
Lbs./Sq.Ft.	6.27	6.85	6.42	7.23	6.87
Down time (days)	13	10	13	12	13

Data for week ending 05/23/97.

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Excerpts from the Latest Economic Research Service and National Agricultural Statistics Service USDA Reports

“Livestock, Dairy and Poultry Situation and Outlook” (ERS)

“Broiler Hatchery” and “Chicken and Eggs” (NASS)

Broiler Eggs Set in 15 Selected Survey States Up 5 Percent
Commercial hatcheries in the 15-state weekly program set 175 million eggs during the week ending May 17, 1997. This was up 5 percent from the eggs set the corresponding week a year earlier according to the National Agricultural Statistical Service (NASS) report.

Broiler growers in the 15-state weekly program increased broiler chick placements 4 percent from the comparable week in 1996.

Production Expected to Increase in Second Quarter
Economic Research Service (ERS) expects production to increase about 5 percent from last year in the second quarter of 1997. Broiler production in 1998 is expected to increase more strongly than it has since 1994, by 6-7 percent. The pullet chick hatch for the broiler hatchery supply flock was 7 percent above last year for the first quarter of 1997 after 1-percent annual increases in both 1995 and 1996.

Turkey Prices Higher

Wholesale hen turkey prices have been above a year ago during early May after remaining below a year ago since July 1996. High stocks had kept pressure on market prices early in the year, but stocks of whole birds have dropped below a year ago in recent months.

Production has been about the same as last year in the second quarter and exports have been quite strong. Net returns to turkey producers continue negative even with higher prices and considerably lower feed costs than a year ago. Stronger production increases are expected in 1998 as positive net returns during the fourth quarter of 1997 and lower feed costs encourage producers to raise more birds.

Turkey Exports to Expand in 1997

Exports of turkey and turkey products are forecast to reach 477 million pounds in 1997, about 9 percent above 1996. Expanding shipments of turkey products to Mexico and Canada and a rapidly growing market in Hong Kong are expected to offset anticipated lower exports to Russia and Korea. Growth in exports is forecast to slow in 1998.

Egg Production Increasing

Table egg production is expected to increase about 2 percent during the second quarter. A larger laying flock is expected to be maintained throughout 1997. Strong net returns to egg producers over the last year have encouraged
(continued on page 2)

Broiler Performance Data (Company)
Live Production Cost

	Average Co.	Top 25%	Top 5 Co's
Feed cost/ton w/o color	197.22	193.20	197.22
Feed cost/lb meat	19.51	18.31	18.28
Days to 4.6 lbs	45	45	44
Med. cost/ton	4.12	3.63	4.69
Chick cost/lb	4.26	4.22	4.05
Vac-Med. cost/lb	0.11	0.10	0.11
WB & 1/2 parts condemn. cost/lb	0.33	0.19	0.17
% Mortality	4.86	3.94	4.12
Sq. Ft. @ placement	0.76	0.73	0.75
Lbs/Sq. Ft.	6.71	6.43	6.32
Down time (days)	12	13	13

Data for week ending 05/23/97.

Broiler Whole Bird Condemnation (Region)
Live Production Cost

	SW	Mid-West	S. East	Mid-Atlantic	S. Central
% Septox	0.336	0.496	0.177	0.367	0.287
% Airsac	0.150	0.098	0.251	0.391	0.272
% I.P.	0.089	0.107	0.132	0.134	0.305
% Leukosis	0.012	0.013	0.004	0.061	0.007
% Bruise	0.014	0.012	0.014	0.014	0.016
% Other	0.028	0.027	0.065	0.037	0.046
% Total	0.629	0.753	0.642	1.005	0.934
% 1/2 parts condemnations.	0.565	0.634	0.292	0.413	0.513

Data for week ending 05/23/97.

Excerpts from NASS USDA Reports
(continued from page 2)

increased production. April was the first month since August 1996 that net returns to egg producers were below 10 cents per dozen. Lower egg prices may bring net returns to near break-even for May. Placements for the hatchery supply flock were down considerably in March, indicating production expansion plans could be more conservative in the future. However, lower feed costs are expected to keep egg production profitable for 1997 and another 2-3 percent increase in production is expected for 1998.

Egg-Type Chicks Hatched Up Slightly

NASS reports egg type chicks hatched during April totalled 38.7 million, up 9 percent from April 1996. Eggs in incubators totalled 36.4 million on May 1, 1997, up 8 percent from a year ago. Domestic placements of egg-type pullet chicks for future hatchery supply flocks by leading breeders totalled 316,000 during April 1997, up 25 percent from the 252,000 of April 1996.

Egg Exports Projected Higher in 1997

Total egg exports are expected to increase in 1997 as continued growth in exports of egg products offsets a possible decline in shipments of shell eggs. Larger shipments of egg products are expected to go to Japan, Mexico, and Canada. With a number of food scares involving raw foods buffeting the Japanese consumer, demand is expected to increase for egg products use in prepared foods. As the Mexican economy continues to show improvements, use of egg products is forecast to expand.

Shipments of eggs and egg products are expected to reach 263 million dozen (shell egg equivalents) in 1997, 4 percent higher than in 1996. Larger exports to Japan and Canada (egg products) and the EU (shell eggs and egg products) are expected to offset smaller shipments of shell eggs to Hong Kong. Exports are forecast to grow only 1 percent in 1998.

Poultry Diagnostic and Research Center News

The Bayer, David P. Anderson Fellowship

At the recent retirement dinner for Dr. David P. Anderson, former dean of the University of Georgia College of Veterinary Medicine, Bayer representatives announced the

company's financial support of a fellowship. The Bayer, David P. Anderson Fellowship is a permanent position to support a veterinary graduate in pursuit of a Ph.D. at PDRC.

Bayer and PRDC representatives have selected Dr. Nancy Stedman as the first Bayer, David P. Anderson Fellow. Dr. Stedman received her D.V.M. from the University of California at Davis and recently completed an avian medicine residency at UC Davis. She is a diplomate of the American College of Poultry Veterinarians. Dr. Stedman has a strong poultry background and was highly recommended.

**Broiler Whole Bird Condemnation (Company)
Live Production Cost**

	Average Co.	Top 25%	Top 5 Co.'s
% Septox	0.323	0.261	0.189
% Airsac	0.240	0.093	0.083
% I.P.	0.148	0.064	0.043
% Leukosis	0.023	0.005	0.008
% Bruise	0.015	0.009	0.006
% Other	0.049	0.029	0.024
% Total	0.798	0.451	0.354
% 1/2 parts condemnations	0.506	0.294	0.328

PDRC Building Program

A groundbreaking ceremony for the PDRC building project was held October 1. The event was attended by industry leaders, alumni and friends. The crowd was addressed by University of Georgia President Dr. Charles Knapp and Mr. Abit Massey of the Georgia Poultry Federation. Both speakers stressed the importance of poultry to Georgia and cited the PDRC building project as evidence of the state's support of the poultry industry.

Data for week ending 05/23/97.

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PDRC News...

(continued from page 3)

Currently under construction, is a new laboratory-office building and a new diagnostic necropsy facility. The original main PDRC building will also be renovated. The \$6.5 million construction project is scheduled for completion at the end of 1997.

Meeting Report

At the Southern Conference on Avian Diseases held in Atlanta, Georgia during January 20-21, 1997, L.C. Johnson presented research done at Auburn University entitled "Source of *Escherichia coli* and Age Upon the Development of Cellulitis in Broilers." Results of two different trials were discussed. In the first trial, birds were inoculated with *E. coli* isolates from fecal material, airsacculitis lesions or cellulitis lesions. In the second trial, broilers were inoculated at either 4, 7, 10, 16, 28, or 52 days with an *E. coli* isolate originating from a cellulitis lesion. In the first trial, the cellulitis isolate caused the highest incidence of cellulitis (77.5%), followed by the fecal isolate (47.5%), and the airsacculitis isolate (25%). In the second trial, inoculation at seven days produced only a 20% incidence of cellulitis. There were no significant differences among other age groups in which the incidence ranged from 82.5% to 95%. This study suggests that the source of an *E. coli* isolate is more important than the age of the bird at inoculation in the development of cellulitis.

Abstract provided by Dr. Joel L. Cline, MAM Student

Dr. Calvin Keeler, University of Delaware, addressed "Distinguishing Infectious Laryngotracheitis Vaccine and Field Viruses - A New Approach" at the Poultry Health and Processing Meeting. Infectious Laryngotracheitis has become an important disease recently not only due to its effect on production, but also because of its negative impact on international trade in poultry products. The export of poultry to certain countries has been hindered due to the presence of this disease in U.S. flocks. The infectious agent involved in ILT, a herpes virus, has been difficult to differentiate into various strains. Accordingly, the same problem has occurred when attempts have been made to distinguish the vaccine strains of ILT Virus from field strains. The inability to ascertain differences between field strains and vaccine strains has made it difficult to specify the source of an outbreak in some cases. As a result, controversy exists regarding the use of vaccines for this disease. Since the current vaccines contain attenuated live viruses, birds can become carriers of the vaccine virus when vaccinated. Some researchers believe it is possible that the attenuated virus, once harbored in its host, may revert to a more virulent state and cause further outbreaks. Thus, the ability to distinguish field strains from vaccine strains is important. This paper describes a technique currently under development to target non-essential genes in the ILT Virus genome, disrupt those sequences and replace them with a marker to produce either colored or fluorescent plaques. The "marked" virus would then be used as the vaccine strain. In this manner, outbreaks occurring post-vaccination, could be confirmed as either wild type strain or a vaccine strain, which is no longer attenuated. Results of such testing might lead to modifications in the use of vaccines for ILT or in the production of new vaccines.

Abstract provided by Dr. Robert O'Connor, MAM Student

Integrated Pest Management

Understanding Rodents

By Dr. James Dawe

Understanding Rodents

The Norway rat, roof rat and house mouse are the three rodents that do the most damage to the poultry industry. They damage poultry housing, consume and contaminate feed, and harbor and transmit disease. Their control hinges on an understanding of their individual habits, requirements, capabilities and points of vulnerability. Then a successful rodent control program can be put in place, using the principles of Integrated Pest Management (IPM).

I. Rodent Facts of Interest

- A. The average rat weighing 1/2 pound, will eat one ounce of feed per day. The average farm can easily support 50 rats. This represents over 1/2 ton of feed lost, over 500 pounds of broiler live weight per farm per year.
- B. One pair of breeding rats potentially can generate 15,000 offspring per year (based on 100% livability).
- C. In six months, one pair of mice generate 18,000 fecal droppings that can contain harmful poultry diseases such as *Salmonella*, *E. coli*, Bordetellosis, Leptospirosis, *Erysipelas*, Fowl Pox and *Pasturella* (Fowl Cholera). Dr. Haynes (Mississippi State University) notes that rats spread 35 different human diseases and transport 18 different kinds of mites, lice, fleas and ticks.
- D. Rats can get through a hole the size of a quarter, and mice can get through a hole much smaller (1/4 inch).
- E. Rats can gnaw through wood, insulation, metal, wire, lead pipe, cinder block and cement. Their chisel-like teeth exert a force of 24,000 pounds per square inch, and these teeth continuously grow (5 inches a year) as they are worn down. Deprived of the ability to constantly gnaw, these teeth would grow through the opposing jaw or skull bone.
- F. In a study comparing five *Salmonella enteritidis* (S.E.) positive farms to five S.E. negative farms, Henzler and Opitz found that:
 - 24% of the mice on S.E. positive farms were culture-positive for S.E.
 - no mice were culture-positive for S.E. on S.E. clean farms
 - 230,000 S.E. organisms were isolated from one fecal pellet from one mouse.
 - S.E. persisted for at least 10 months in an infected mouse population.
- G. Norway and roof rats range 100 to 150 feet from their burrows in search of food, and need 1 ounce of water a day to survive.
- H. House mice range only 15-30 feet, and can live without a standing water supply for days.
- I. Rats and mice spread poultry diseases, including *Salmonella*, when they travel in search of food or shelter from contaminated farms to clean ones, via their droppings, feet, fur, saliva, urine or blood.
- J. Long-term use of "multiple-dose" anticoagulant poisons (versus single-feeding poisons) produces a genetically resistant rodent population.
- K. Robert M. Corrigan notes that rats are excellent swimmers, climbers and jumpers. They can swim up to 1/2-mile in open water, and a rat can jump 3 feet vertically from a stand-still. He can survive a 50 foot fall without serious injury.
- L. In a poultry extension bulletin from Mississippi State University, Dr. Haynes advises: "If you never see rats but see signs of them, there are from 1 to 100 on the premises. If you see them occasionally at night, there are 100 to 500. Occasional daytime and numerous night sightings indicate 400 to 1,000. Seeing several in the daytime may indicate a presence of as many as 5,000."

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Meetings, Seminars and Conventions

1997 May

May 28: Salmonella Forum, New Orleans, LA. Contact: Elaine Robson, The Salmonella Forum, P.O. Box 4, Driffield, East Yorkshire, England YO25 9DJ. Phone, 44-1377-241724.

May 28-29: Missouri Poultry Federation Spring Meeting. Contact: Johanna Derda, Phone (573) 761-5610, Fax (573) 761-5619.

May 28-31: 4th International Symposium on Avian Influenza, University of Georgia Center for Continuing Education, Athens, GA. Contact Dr. David E. Swayne, Southeast Poultry Research Laboratory, USDA ARS, 934 College Station Road, Athens, GA 30605. Phone (706) 546-3433.

1997 June

June 5-7: Alabama Poultry and Egg Convention, Birmingham, AL. Contact: Alabama Poultry and Egg Assn., P.O. Box 240, Montgomery, AL 36101-0240. Phone (334) 265-2732

June 5-7: Arkansas Poultry Festival, Arlington Hotel, Hot Springs, AR. Contact Judy Kimbrell, Arkansas Poultry Federation, P.O. Box 1446, Little Rock, AR 72203. Phone (501) 375-8131.

June 7-10: 5th European Symposium on Poultry Welfare, Wageningen International Conference Center, Lawickse Allee, Wageningen, The Netherlands. Contact: Mrs. H. Kentie, IAC, Section OCC, P.O. Box 88, 6700 AB Wageningen, The Netherlands. Phone: +31 317 490111.

June 8-10: NTF Summer Meeting, Grove Park Inn, Ashville, N.C. Contact: Laurel Cunningham, National Turkey Federation, 1225 New York Avenue, NW, Suite 400, Washington D.C. 20005. Phone (202) 898-0100.

June 16-18: USPEA Financial Management Seminar, Hilton Hotel, Myrtle Beach, S.C. Contact U.S. Poultry and Egg Association, 1530 Cooledge Road, Tucker, GA 30084-7303, Phone (770) 493-9401

June 17-21: USAPEEC Annual Convention, San Diego, CA. Contact: USA Poultry & Egg Export Council, 2300 W. Park Place Blvd., Suite 100, Stone Mountain, GA 30087. Phone (770) 413-0006.

June 23-25: US Poultry HACCP Compliance Training Class for Turkey Processors, Raleigh, NC. Contact: US Poultry and Egg Assn., 1530 Cooledge Rd., Tucker, GA 30084-7303. Phone (770) 493-9401.

June 24-27: KOPOEX/Korea Poultry Expo, Korean Exhibition Center, Seoul, Korea. Contact: Y. H. Bac, Manager KOPOEX secretariat, Korea Exhibition Ctr., 159 Samsung-dong, Kangnam-gu, Seoul 135-731 Korea. Phone 82-2-551-1142/1118.

June 27-28: Delmarva Chicken Festival, Milford, DE. Contact: Connie Parvis, Delmarva Poultry Industry, Rd. 6, Box 47, Georgetown, DE 19947-9622. Phone (302) 856-9037

1997 July

July 10-12: Texas Poultry Federation Convention, San Antonio, TX. Contact: James C. Grimm, Executive VP, Texas Poultry Federation, 8140 Burnet Rd., Austin, TX 78757-7799. Phone (512) 451-6816.

July 10-13 South Carolina Poultry Federation Convention, Crown Plaza Resort, Hilton Head Island, S.C., Contact S.C. Poultry Federation, 1201 Main St., Suite 1220, Columbia S.C. 29201. Phone (803) 748-1283.

July 15-16: US Poultry Hatchery/Breeder Clinic, Hilton Hotel Downtown, Atlanta, GA. Contact: U.S. Poultry and Egg Assn., 1530 Cooledge Rd., Tucker, GA 30084-7303. Phone (770) 493-9401.

July 16-17 Broiler Marketing Seminar '97, Nemaocolin Woodlands Resort, Farmington, PA. Contact: National Broiler Council, 1155 15th Street, N.W., Washington, D.C. 20005-2707. Phone (202) 296-2622.

July 18 NBC Marketing Committee Meeting, Nemaocolin Woodlands Resort, Farmington, PA. Contact: National Broiler Council, 1155 15th Street, N.W. Washington, D.C. 20005-2707. Phone (202) 296-2622.

1997 August

August 4-6: USPEA Information Systems Seminar, Hilton Hotel, Myrtle Beach, S.C. Contact: U.S. Poultry and Egg Assn., 1530 Cooledge Road, Tucker, GA 30084-7303. Phone (770) 493-9401.

August 21-22: USPEA Poultry Environmental Management Seminar, Omni Hotel, Atlanta, GA. Contact: U.S. Poultry and Egg Association, 1530 Cooledge Rd., Tucker, GA 30084-7303. Phone (770) 493-9401.

1997 September

September 17-18: Poultry Production and Health Seminar, Hilton Hotel Downtown, Atlanta, GA. Contact: U.S. Poultry and Egg Assn., 1530 Cooledge Road, Tucker, GA 30084-7303. Phone (770) 493-9401, Fax (770) 493-9257.

September 23-24: Missouri Poultry Federation Fall Convention, Sheraton Hawthorn Park, Springfield, MO. Contact: Johanna Derda, Missouri Poultry Federation, 225 East Capitol Ave., Jefferson City, MO 65101. Phone (573) 761-5610.

September 24-25: Northeast Poultry Show, Holiday Inn, Lancaster, PA. Contact: Pennsylvania Poultry Federation, 500 N. Progress Ave., Harrisburg, PA 17109. Phone (717) 652-7530.

Call for News From the Poultry Professionals

In order to make this a useful information tool for you and your colleagues, we need your help. Please take a moment to write down industry news or important meeting dates relating to your organization. Please be sure to include a contact name, phone and fax number for those readers needing additional detail. We would also like to initiate a personals column that would include, births, marriages, awards, etc. Thank you for your contributions.

Important dates or news from:

Name: _____

Title: _____

Phone: _____ Fax: _____

Organization: _____

Please fax this page to Sue Clanton, Department of Avian Medicine, University of Georgia, at (706) 542-5630.

Also, comments may be sent to avianmed@uga.cc.uga.edu via e-mail.

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