Part II in a Series on Nutrient Management

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The University of Georgia

Development and Implementation of Comprehensive Nutrient Management Plans for Poultry Producers in Georgia

The Department of Poultry Science, The University of Georgia, and the Georgia Poultry Federation have been working collaboratively in the development and implementation of nutrient management plans for Georgia’s poultry producers since 1994. At that time poultry industry representatives and members of the College of Agricultural and Environmental Sciences at UGA realized the importance of establishing and documenting uniform methods for the application of poultry litter to the soil. The perceived benefits of such a program would be to enhance the economic value of poultry litter as a soil amendment and to assure the continued protection of Georgia’s water systems.

Continued on page 2

<table>
<thead>
<tr>
<th>Broiler Performance Data (Region)</th>
<th>Live Production Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SW</td>
</tr>
<tr>
<td>Feed cost/ton w/o color ($)</td>
<td>122.23</td>
</tr>
<tr>
<td>Feed cost/lb meat (¢)</td>
<td>11.94</td>
</tr>
<tr>
<td>Days to 4.6 lbs</td>
<td>48</td>
</tr>
<tr>
<td>Med. cost/ton (¢)</td>
<td>2.86</td>
</tr>
<tr>
<td>Chick cost/lb (¢)</td>
<td>4.13</td>
</tr>
<tr>
<td>Vac-Med cost/lb (¢)</td>
<td>0.06</td>
</tr>
<tr>
<td>WB &amp; 1/2 parts condemn. cost/lb</td>
<td>0.25</td>
</tr>
<tr>
<td>% mortality</td>
<td>6.42</td>
</tr>
<tr>
<td>Sq. Ft. @ placement</td>
<td>0.80</td>
</tr>
<tr>
<td>Lbs./Sq. Ft.</td>
<td>5.74</td>
</tr>
<tr>
<td>Down time (days)</td>
<td>12</td>
</tr>
</tbody>
</table>

Data for week ending 8/21/99

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E-Mail Notice

We are currently organizing our system to enable us to e-mail the Poultry Informed Professional newsletter. If you would like to receive your newsletter via e-mail, please fax your name and e-mail address to Sue Clanton at (706) 542-5630.
Part II in a Series on Nutrient Management

Continued from page 1

To achieve these objectives, a task force involving members of the Georgia Poultry Federation, UGA faculty from the Departments of Poultry Science, Agricultural Engineering, and Crop and Soil Sciences, and representatives from the Natural Resource Conservation Service was convened in 1994 to formulate a plan of action for providing a comprehensive voluntary nutrient management program for Georgia's poultry producers. Although the focus was on the management of poultry litter for land application, appropriate methods for dead bird disposal were also incorporated into the plan.

As a result of the work of this task force, educational materials have been developed to assist in the education and implementation of voluntary comprehensive nutrient management plans (CNMP) for Georgia's poultry producers. These educational materials are being combined into a CNMP training notebook which will provide detailed information explaining the steps and procedures required for properly managing poultry and litter applications to the soil.

The CNMP training notebook contains sections relating to current state and federal regulations affecting poultry operations, procedures for soil and litter analysis, nutrient budget worksheets and records, application and storage methods, practices for preventing soil erosion and water contamination, and appropriate methods for dead bird disposal.

The development of these educational materials is providing the basis for the implementation of an extension outreach program. With the cooperation of the poultry industry, the University of Georgia is providing educational meetings and training sessions for poultry company personnel and contract growers. Over the past two years, awareness trainings for personnel of approximately five poultry companies have been conducted. One company has completed trainings with their growers.

On March 11, 1999, following a series of meetings, a joint industry group to the Georgia Poultry Federation approved in concept the policy of having all growers in the state trained on CNMP's by 2002. On August 19, 1999, the Board of Directors of the Georgia Poultry Federation officially adopted this policy. As a result of this policy position, trainings are currently being scheduled with poultry companies to begin this new phase as early as September, 1999. In addition, training sessions to bring county agents up to date on these programs are planned for this fall and winter.

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The cooperation of Georgia’s poultry companies with the implementation of these programs represents a proactive approach and demonstrates a continuing commitment of this industry to management practices that are protective of the environment while assuring continued growth and success of this very important agricultural business in Georgia.

For additional information on nutrient management and the environment or any of the following bulletins, contact Dr. Dan Cunningham, Extension Poultry Scientist, University of Georgia. Email: dcungham@uga.edu

- Composting Poultry Mortality
- Animal Waste and the Environment
- Georgia’s Agricultural Water Regulations
- Structures for Broiler Litter Manure Storage
- Broiler Production, Georgia Farm Assessment System

<table>
<thead>
<tr>
<th>Broiler Whole Bird Condemnation (Company)</th>
<th>Average Co.</th>
<th>Top 25%</th>
<th>Top 5 Co.’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Septox</td>
<td>0.307</td>
<td>0.243</td>
<td>0.194</td>
</tr>
<tr>
<td>% Air sac</td>
<td>0.202</td>
<td>0.086</td>
<td>0.066</td>
</tr>
<tr>
<td>% I.P.</td>
<td>0.122</td>
<td>0.042</td>
<td>0.076</td>
</tr>
<tr>
<td>% Leukosis</td>
<td>0.015</td>
<td>0.004</td>
<td>0.007</td>
</tr>
<tr>
<td>% Bruise</td>
<td>0.013</td>
<td>0.012</td>
<td>0.025</td>
</tr>
<tr>
<td>% Other</td>
<td>0.019</td>
<td>0.008</td>
<td>0.002</td>
</tr>
<tr>
<td>% Total</td>
<td>0.679</td>
<td>0.395</td>
<td>0.370</td>
</tr>
<tr>
<td>% 1/2 parts condemnations</td>
<td>0.408</td>
<td>0.305</td>
<td>0.253</td>
</tr>
</tbody>
</table>

Data for week ending 8/21/99

Congratulations

Congratulations to John Maurer, Anne Summers, Charles Hofacre and Cherie Drenzek of the University of Georgia, College of Veterinary Medicine, and David White, U.S. Food and Drug Administration on receiving an $814,000 Competitive Grant from U.S.D.A. Their research project will be in the epidemiological approaches for Food Safety area and is entitled: “Following Resistant Salmonella thru the Food Chain: A Molecular Ecology Approach.”

The University of Georgia is committed to the principle of affirmative action and shall not discriminate against otherwise qualified persons on the basis of race, color, religion, national origin, sex, age, physical or mental handicap, disability, or veteran’s status in its recruitment, admissions, employment, facility and program accessibility, or services.

The Poultry Informed Professional Newsletter is published with support from Bayer Corporation
According to the most recent National Agricultural Statistic Service (NASS) report, commercial hatcheries in the 15-State weekly program set 181 million eggs during the week ending August 21, 1999. This was up 3 percent from the eggs set the corresponding week a year earlier. Average hatchability for chicks hatched during the week was 81 percent.

Broiler growers in the 15-State program placed 143 million chicks for meat production during the week ending August 21, 1999. Placements were up 4 percent from the comparable week in 1998. Cumulative placements from January 3, 1999, through August 21, 1999, were 4.78 billion, up 3 percent from the same period a year earlier.

Broiler Weights Declining

According to the latest Economic Research Service (ERS) report, early August weekly slaughter figures show broiler weights below a year ago. This is in strong contrast to the nearly 5 percent weight increases typical of slaughter during July. Hot weather through broiler production areas in late July and early August are probably responsible for the weight depression. Producer net returns continue quite strong as lower feed costs offset whole bird prices nearly 10 cents per pound below a year ago. In response, pullet hatch for potential placement in the hatchery supply flock was 2 percent higher than a year ago in June and has been 7 percent larger for the period 7-15 months earlier, which is the approximate time when the birds that are in the hatchery supply flock now would have been hatched. The broiler-type hatching egg production flock was 5 percent larger than a year ago on July 1.

July Egg Production Up 3 Percent

According to the latest NASS report, U.S. egg production totalled 6.91 billion during July 1999, up 3 percent from the 6.72 billion produced in 1998. Production included 5.80 billion table eggs and 1.11 billion hatching eggs, of which 1.04 billion were broiler-type and 67.0 million were egg-type. The total number of layers during July 1999 averaged 320 million, up 4 percent from the total average number of layers during July 1998. July egg production per 100 layers was 2,159 eggs, down 1 percent from 2,175 eggs in July 1998.

All layers in the U.S. on August 1, 1999, totaled 319 million, up 3 percent from a year ago. The 319 million layers consisted of 260 million layers producing table or commercial type eggs, 56.1 million layers producing broiler-type hatching eggs, and 2.80 million layers producing egg-type hatching eggs. Rate of lay per day on August 1, 1999, averaged 69.2 eggs per 100 layers, down 1 percent from the 70.2 a year ago.

Laying flocks in the 30 major egg producing States produced 6.50 billion eggs during July, up 2 percent from July 1998. The average number of layers during July, at 301 million, was up 3 percent from a year earlier.

Egg-Type Chicks Hatched Down 4 Percent

Egg-type chicks hatched during July totaled 34.3 million, down 4 percent from July 1998. Eggs in incubators totaled 29.5 million on August 1, 1999, up 7 percent from a year ago.

Domestic placements of egg-type pullet chicks for future hatchery supply flocks by leading breeders totaled 231,000 during July 1999, down 22 percent from July 1998.

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Egg Prices Remain Volatile

The latest ERS report states that hot weather in early July, in some of the leading egg production regions, brought a sudden increase for large egg prices. Hot weather reduces egg production slightly but primarily reduces the size of eggs produced by hens causing a decrease in large egg production and an increase in medium egg production. New York large wholesale egg prices had fallen to 46 cents per dozen in late June but reached a peak of 84 cents per dozen in mid July while prices for medium size eggs changed much less going from 38 cents to 48 cents. More moderate summer weather in mid July allowed large egg supplies to increase again, bringing prices back down to 65 cents per dozen for large and 37 cents per dozen for medium eggs in mid August.

With normal weather patterns egg prices are expected to remain below a year ago through the rest of 1999. Lower feed costs should allow most producers to remain profitable, even with the lower prices, and continue plans for production increases.

Broiler Hatch Up 4 Percent

According to the latest NASS report the July 1999 hatch of broiler-type chicks, at 751 million, was up 4 percent from July of the previous year. There were 626 million eggs in incubators on August 1, 1999, up 4 percent from a year earlier.

Leading breeders placed 7.09 million broiler-type pullet chicks for future domestic hatchery supply flocks during July 1999, up 4 percent from July 1998.

Turkeys Raised Down 4 Percent from 1998

The preliminary estimate of turkeys raised in the United States during 1999 is 275 million, down 4 percent from the 285 million raised during 1998.

The following six States are expected to account for about two-thirds of the turkeys produced in the United States during 1999:

North Carolina is forecast to continue as the nation’s leader in turkey production with 48.5 million birds, 3 percent less than 1998.

Minnesota ranks second with 43.5 million, down 2 percent from last year.

Arkansas is in third place by producing 27.0 million birds, 4 percent less than a year ago.

Virginia is the nation’s fourth largest producing state with 25.0 million birds, down 4 percent from a year ago.

Missouri is in fifth place with 22.0 million birds, unchanged from last year’s production.

California expects to raise 18.0 million turkeys, 5 percent below a year earlier.

Turkey Prices Strengthening

The latest ERS report states that reductions in turkey production during the last 3 quarters of 1998 and the first quarter of 1999 have reduced stock levels and brought higher prices for turkeys. Eastern region hen prices were about 10 cents per pound above a year ago in July and that spread is continuing in early August. Stronger prices are expected to continue into the fall but the spread may narrow as production increases accelerate in the third quarter.
Summary of Meeting Reports at the 1999 AAAP/AVMA Convention

Intussusception in Multiple Pullet Flocks

Dr. Francene S. Van Sambeek of the Hinton Mitchem Poultry Diagnostic Laboratory presented at the 136th AVMA Annual Convention a case report entitled ‘Intussusception in Multiple Pullet Flocks’. Intussusceptions occur when a portion of the intestine telescopes into the adjacent part of the intestine resulting in organ deprivation and tissue necrosis. There are limited published reports on poultry. This case involved 6 acutely affected flocks of Ross Broiler Breeder females, 5-8 weeks in age. They were reported to have “bloody rear-ends with bloody droppings”, there was a 2% mortality in 1 week. On necropsy the birds were found to have ileocolic and jejunoileal intussusceptions. There was intestinal prolapse through the cloacal opening with cannibalism and hemorrhaging, and blanched muscles and kidneys; bloody cecal cores were found on one farm. The most significant finding from intestinal scrapings was that the birds were positive for many Gram positive rods with subterminal endospores (Clostridia spp.). Other tests were negative. The feed mill was examined and it was discovered that a new feed formula change also coincided with the change to the alternating day feeding schedule. The birds were returned to the original feed formula with BMD® added, they were also given Solutracin (400mg/ton). The mortality was normal after one day and no intussusceptions were seen after the return to the original feed. It was concluded that the birds were stressed from the change in the feeding schedule, the removal of the Gram positive antibiotic allowed overgrowth and Gram positive enteritis causing gut irritation leading to intussusception formation. BMD® appeared to be a protective agent in the pullet diets.

Naola Ferguson, DVM
Master of Avian Medicine student
The University of Georgia

Mark Your Calendar
and Plan to Attend

The International Poultry Scientific Forum
Sponsored by the
Southern Poultry Science Society
and
The Southern Conference on Avian Diseases
will be held January 17 and 18, 2000
in the Georgia World Congress Center,
Atlanta, Georgia

A call for papers will be sent out in October.

The meetings are held the two days
before the International Poultry Exposition at the
Georgia World Congress Center.
### Meetings, Seminars and Conventions

#### 1999

**September**

- **September 19-23:** European Symposium on Quality of Poultrymeat, Eggs and Egg Products, Bologna, Italy. Contact: Chairman of Organising Committee, Professor Achille Franchini, University of Bologna, Via San Giacomo 9, 40126 Bologna, Italy. Fax: +39 (0) 51 251936.

- **September 21:** Incubation & Fertility Research Group (WPSA Working Group 6 (Reproduction) 1999 Meeting, Tours, France. Contact: Dr. Glenn Baggott, Department of Biology, Birkbeck College, University of London, Malet St, London WC1E 7HX, UK. Fax: +44 (0) 141 631 6246.


- **September 22-24:** International Conference on Bird Reproduction, Vinci International Congress Centre, Tours, France. Contact: INRA, Avian Research Station, National Institute for Agronomic Research, 37380 Nouzilly, France.

- **September 25-28:** NAAC Annual Meeting, North Raleigh Hilton Hotel, Raleigh, N.C. Contact: North American Agromedicine Consortium, c/o W. Gregory Cope, Department of Toxicology, North Carolina State University, Box 7633, Raleigh, N.C. 27695. Phone: 919-515-5296.

- **September 23-29:** 26th World Veterinary Congress, Lyon, France. Contact: Mondial Vet 1999, CNVSPA, 40 rue de Berri, F75008 Paris, France. Fax: +33 (0) 153 83 91 69.

- **September 28:** WESTVET 10, Western Meeting of Poultry Clinicians and Pathologists, Post Hotel, Lake Louise, Alta, Canada. Contact: Dr. Stew Ritchie, Phone: (604) 854-6600, Fax: (604) 854-6100. e-mail: cpctld@uniserve.com

- **September 28-29:** Georgia Poultry Conference, The Classic Center, Athens, GA. Contact: Georgia Poultry Federation, P.O. Box 763, Gainsville, GA 30503. Phone: 770-532-0473; or Extension Poultry Science, University of Georgia, Athens, GA 30602. Phone: 706-542-1325.

#### 1999 October

- **Oct. 3-5:** North Central Avian Disease Conference, Minneapolis Airport Hilton Hotel, Minneapolis, Minn. Contact: Dr. Dan Shaw, program chairman, Phone: 612-625-4256; or Dr. Dave Halvorsen, secretary-treasurer, Phone: 612-625-5292.

- **Oct. 3-7:** Saudi Agriculture ‘99, 18th Agriculture, Water Technology and Agri Industry Exhibition, Riyadh Exhibition Centre. Contact: Riyadh Exhibitions Company Ltd, P.O. Box 560 10, Riyadh 115544, Saudi Arabia. Fax: +966 1 454 4846.

- **Oct. 13-14:** N.C. Turkey Industry Days Conference, Brownstone Hotel, Raleigh, N.C. Contact: Jesse L. Grimes, Extension turkey specialist, North Carolina State University, Scott Hall/Campus Box 7608, Raleigh, N.C. 27695. Phone: 919-515-5406.

- **Oct. 10-13:** Eleventh Australian Poultry & Feed Convention, Royal Pines Resort, Gold Coast, Australia. Contact: The Convention Secretary, PO Box 1384, North Sydney NSW 2059, Australia. Fax: +61 2 9925 0627.

- **Oct. 17-20:** Workshop on Metabolic Disorders in Poultry, Izmir, Turkey. Contact: Congress Secretariat, Ege University, Faculty of Agriculture, Dept. of Animal Science, 35100 Izmir, Turkey. Fax: +90 232 388 18 64.

- **Oct. 20-22:** National Meeting on Poultry Health & Processing, Sheraton Fountainbleau Hotel, Ocean City, Maryland, USA. Contact: Sharon Webb, Delmarva Poultry Industry, Inc., RD 6, Box 47, Georgetown, DE 19947-9575, USA. Fax: +1 302-856-1845.

- **Oct. 31-Nov. 2:** 33rd Annual UK Poultry Industry Conference, Statik Blackpool Hotel, Blackpool, Lancashire, U.K. Contact: Tony Warner, Sec. 011-44-1952-605680.

#### 1999 November

- **Nov. 3-5:** Livexpo Shanghai ’99, Shanghai International Exhibition for Production & Processing of Livestock and Poultry, Shanghai International Exhibition Center, P.R. China. Contact: Intex Shanghai Co. Ltd., 88 Loushanguan Rd., Shanghai 200335, P.R. China. Mr. David Hong, Miss Lisa Chen. Phone: +86 21 62755800; Fax: +86 21 62757210.

- **Nov. 7-10:** Expoaviga, International Poultry & Livestock Technology Show, Montjuic Trade Fair Center, Fira de Barcelona, Spain. Contact: F. Xavier Castells, Manager, Expoaviga, Avda. Reina Mo. Christina, s/n 08004 Barcelona, Spain. Fax: +34 93 2332602

- **Nov. 9-12:** VIV-Europe, International Trade Fair on Intensive Animal Production, Jaarbeurs Complex, Utrecht, Netherlands. Contact: VIV Secretariat, Royal Dutch Jaarbeurs, P.O. Box 8500, 3503 RM Utrecht, Netherlands. Fax: +31 30 29 55 585.

- **Nov. 28-December 1:** EUROTIER International Exhibition for Livestock & Poultry Production, Hannover, Germany. Contact: Daniel M. Koning, DLG, Eschborner Landstrasse 122, D-60489 Frankfurt, Germany. Fax: +49 69 24788-113

#### 2000

- **Jan. 19-21:** 2000 International Poultry Exposition, Georgia World Congress Centre, Atlanta, Georgia, USA. Contact: US Poultry & Egg Association, 1530 Coolidge Road, Tucker, Georgia 30084, USA. Fax: +1 770 493-9257

- **March 29-30:** Nebraska Poultry Industries Annual Convention, New World Inn, Highway 30 and 81 South, Columbus, NE. Contact: Nebraska Poultry Industries, Inc., A103 Animal Sciences, University of Nebraska, P.O. Box 830908, Lincoln, NE 68583-0908. Phone: 403-472-2051.