

CURRICULUM VITAE

John B. Carey
Professor, Interim Department Head and Extension Program Leader
Department of Poultry Science
Texas A&M University,
College Station, Texas 77843-2472

March 2007

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EDUCATION

Kansas State University, Manhattan, Kansas.
Ph.D. 1982, Department of Animal Sciences and Industry

South Dakota State University, Brookings, South Dakota.
M. S. 1979, Department of Animal Science

Kansas State University, Manhattan, Kansas.
B.S. 1977, Department of Dairy and Poultry Sciences.

EXPERIENCE

Texas A&M University, College Station, TX – Department of Poultry Science
Associate Professor, Extension Poultry Specialist 1989 - 1992
Professor, Associate Department Head and Extension Program Leader for
Poultry Science 1993 – 2006
Interim Department Head and Extension Program Leader for
Poultry Science 2006 - present

North Carolina State University, Raleigh, NC – Department of Poultry Science
Extension Poultry Specialist, Assistant Professor 1982-1988.
Extension Poultry Specialist, Associate Professor (with tenure) 1988-1989.

Kansas State University, Manhattan, KS – Department of Animal Sciences and Industry
Graduate Research Assistant, 1980 - 1982.

South Dakota State University, Brookings, SD – Department of Animal Science
Graduate Research Assistant, 1977 - 1979.

Carey Hatchery, Alma, Kansas
Raised working in family feed store, hatchery and poultry business.

CURRENT RESPONSIBILITIES - Administrative

Provide leadership for all facets of the department.
Oversight of research, teaching and Extension programs.
Supervision of faculty and staff.
Budgetary responsibility for over \$2,900,000.

Departmental contact to Administration.

Serve to support the activities of the Texas Cooperative Extension, Texas Agricultural Experiment Station and the University.

Serve as first point of contact for Department with
Texas Poultry Federation, the poultry industry and numerous external agencies.

CURRENT ACTIVITIES - Extension Programming

Emergency Disease Programming

Coordinated and led development of a comprehensive plan for avian influenza monitoring, biosecurity, emergency disease response plans and industry indemnification. Conducted several meetings and work sessions involving all aspects of the industry, health professionals, the Texas Animal Health Commission and related agencies.

Plan updated in 2001 to reflect changes in the industry and provide more comprehensive consideration for velogenic Newcastle disease. Plan further updated and approved by
USDA in 2006 to include plans for AI vaccination.

This plan has served as the model for many other states and foreign countries.

Animal Welfare Programming

Member, National Chicken Council Technical Advisory Council on Animal Welfare.
Participated in development of animal welfare guidelines for broiler production.

Member Animal Agriculture Alliance Layer Welfare Guideline development work group.
Developed criteria to evaluate scientific basis of animal welfare guidelines.
Evaluated guidelines for compliance with criteria.

Member, Animal Welfare Committee, Perdue Farms Incorporated.

Extension programming for Texas poultry producers to implement animal welfare

guidelines and support auditing activities.

Environmental Management Programming

Leader, Agriculture Sub-Committee, Quality Water for the Brazos Community Task Force.

Program administered through the Brazos River Authority seeking to find educational and science-based means to assure sustainable economic growth of urban and agricultural enterprises, maintaining water quality in the Brazos-Navasota watershed.

Leadership and coordination of environmental management programming for contract poultry growers.

Conducted with the cooperation of County Extension faculty, the Texas Poultry Federation, poultry integrators, the Natural Resources Conservation Service and the Texas State Soil and Water Conservation Board

Poultry Production Programming

Provide extension programming to new poultry producers, communities and interested parties.

Programming directly utilized by the poultry industry has encompassing all aspects of poultry production management, from site selection to computer scheduling of broiler placements.

Contact has also been maintained with the citizenry of affected communities and other concerned parties with regards to environmental and social impacts of an expanding poultry industry.

Individual clientele consultation concerning multiple aspects of poultry management, facility design and operation.

Youth Programming

Management of all data from over 3300 entrants for Jr. Market Broiler and Turkey Shows at Houston Livestock Show and Rodeo, San Antonio Stock Show and Rodeo, and Star of Texas Fair and Rodeo, 1994 – present. This program requires close coordination with county agents, other specialists and volunteers.

Poultry Shoot-Out Chair, Star of Texas Fair and Rodeo, 1999 – present.

Poultry Biathlon Chair, San Antonio Stock Show and Rodeo, 1997 – present.

Assistant Superintendent, Poultry Judging Contest, San Antonio Stock Show and Rodeo, 1998 – 2004.

CURRENT ACTIVITIES - Research

Fate of Nitrogen in Broiler Production and Nutrient Buildup in Broiler Litter

Through extensive nutrient balance studies with built-up broiler litter, the amount of nitrogen lost to the atmosphere through dust and ammonia has been accurately quantified. The quantification of the ultimate fate of nutrients throughout the production cycle will allow better regulatory policy and management decisions to address environmental issues related to poultry production. Effort are also underway to quantify the relative concentrations of ammonia and ammonium forms of ammoniacal nitrogen, potentially impacting air quality policy decisions.

Role of Amino Acid Nutrition of Laying Hens on Egg Functionality

In an era of declining consumption of shell eggs, liquid egg products have experienced a dramatic increase. The economic and nutritional goals of liquid egg production are different than those for shell egg production. Research into the impact of amino acid nutrition on the yield and composition of liquid egg components has provided producers with information that allows more optimum utilization of resources to produce eggs destined for liquid products. These research findings have been incorporated into the nutritional paradigms of several liquid egg producing firms.

CURRENT ACTIVITIES -Teaching

Animal waste management (POSC 427). This is the only course in the College of Agriculture and Life Sciences that deals with the issues related to animal wastes in production agriculture. The course was developed by Dr. Carey in 1993, prior to this no course directly dealt with these issues. Through the fall of 2006, 1078 students from several majors have taken the course.

Commercial egg production (POSC 326). This course provides students with management, physiology, nutrition and health issues involved in the production of eggs. The course is divided into modules dealing with fundamental material, commercial egg production and broiler breeder hatching egg production. Since 1991, nearly 800 students, primarily from Poultry Science have taken the course.

Poultry meat production (POSC 209). This course is the student's first exposure to many concepts from the commercial poultry industry. The broiler industry is used as a model to explain the impact of vertical integration on production economics, nutrition, physiology and all other management related issues. Since 1992, 785 students have taken the course, primarily from Poultry Science but also representing a wide cross-section of many other majors.

Major Professor for Graduate Students - Masters of Science, Poultry Science

Daniel J. Shafer, August, 1993. Effect of Methionine Consumption on Egg Component Yield and Composition.

Kenneth A. Conrad, August 1994. The Use of Management Science Techniques to Improve Decision Making in Poultry Processing Facilities.

Jerry F. Prochaska, May 1994. The Effect of L-Lysine Intake on Egg Component Yield and Composition in Laying Hens.

Koyle D. Knape, August 2000. Comparison of Different Disinfectants on Egg Shell Microbial Populations and Evaluation of Microbial Levels in Commercial Egg Processing Facilities.

Cesar Chavez, August 2000. Effects of Ultraviolet Light on Aerobic Plate Counts, *Salmonella typhimurium*, and *Escherichia coli* Levels on Eggshell Surfaces.

Craig D. Coufal, August 2000. Effects of Ultraviolet Irradiation on the Microbiology and Hatchability of Broiler Hatching Eggs.

Rebecca A. Russo, December 2001. Reduction of Turkey Hatching Egg Shell Contamination with Ultraviolet Irradiation.

Paige L. Reynolds, May 2002. Comparison of Direct Plating Versus Filtering of Egg Shells Inoculated with *Salmonella typhimurium*.

Truitt P. Niemeyer, August 2002, Utilization of By-Products from Alkaline Hydroxide Preservation of Whole Broiler Carcasses.

Major Professor for Graduate Students - Masters of Agriculture, Poultry Science

Lynette Ryan, August 1999

Major Professor for Graduate Students - Doctor of Philosophy, Poultry Science

Daniel J. Shafer, August 1996. Nutrient Recovery of Poultry Utilizing Alkaline Hydroxide Preservation

Fueng-Lin Kuo, August 1996. Use of Peroxidase-Catalyzed Compound and Ultraviolet Radiation as an Egg Shell Sanitizer.

Cesar Chavez, December 2003. Effects of Dietary Supplemental Methionine Sources on Odor Volatiles in Broiler Excreta.

Craig D. Coufal, August 2005. Quantification of Litter Production and the Fate of Nitrogen in Commercial Broiler Production Systems.

Paige Niemeyer, August 2005. The Impact of Supplemental L-Threonine in Laying Hen Diets on Egg Component Yield, Composition, and Functionality.

LEADERSHIP DEVELOPMENT / TRAINING / CERTIFICATION

Certified Auditor, Chicken Meat and Egg Production, Food Marketers Institute / National Council of Chain Restaurants Animal Welfare Audit Program, September, 2003.

Completed Wakonse South Teaching Workshop, April 2000

Graduate of Class #9 of ESCOP/ACOP Leadership Development Program,
Indianapolis, IN and Washington, DC, 1999

Certified Egg Industry HACCP Training through the American Institute of Baking,
Manhattan, KS, July, 1998.

GRANTS AND CONTRACTS AWARDED

(Total = \$945,002)

JBS United, The available P requirement of male broiler chicks from 0 to 3 wks of age.
December 2006, \$1763.

JBS United, Inorganic Phosphorus and Phytase Efficacy Measured in Live Production
Performance and Cost at Dissimilar Levels in Commercial Broilers, May 2006, \$5290.

Texas State Soil and Water Conservation Commission, Environmental Regulatory
Oversight Assistance for Unpermitted Animal Feeding Operations, February 2006,
\$89,880.

Texas State Soil and Water Conservation Commission, Texas Cooperative Extension Air
Quality Support for Poultry WQMPs, August 2005, \$100,000.

Texas State Soil & Water Conservation Commission, Peach Creek Water Quality
Improvement Project, August 2005, \$30,820.

US Poultry & Egg Association, Evaluation of Ammonia Monitoring Instruments in
Differentiating Ammonia and Ammonium Measurement, April 2005, \$11,465.50.

Desert King and Prince Agri Products, Comparison of the performance of products on
litter ammonia levels and broiler performance. Co-Investigator, November 2004, \$13,800.

Jackson Paper Company, Evaluation of Alternative Litter Material for Broilers.
February 2004, \$8561.

USDA – CREES – National Integrated Water Quality Program, Development of Online
Nutrient Management Certification Course for Technical Service Providers and
Development/Delivery of Educational Programs for CAFOS, Co-PI, September, 2003,
\$275,000

US Poultry & Egg Association, Quantification of the fate of nitrogen in commercial
broiler production systems. May 2003, \$12,878

R.J. Distributors, Litter Treatment Study. February, 2003, \$3710

Cargill Turkey Products, Turkey Yield Study. May, 2002, \$11,295

American Egg Board, Egg Temperature Survey Sub-Contract, August 2002, \$2000

Cargill Turkey Products, Turkey Yield Study. August, 2001, \$11,295

Texas Natural Resource Conservation Commission, Study of Odors and Arsenic Emissions From Poultry Growing Operations. December 1999, \$100,000.

Advanced Technology Program, Environmentally Safe, Simple and Rapid Disposal of Animal Carcasses by Aerobic Thermophile Digestion, November 1999. \$101,650.

Bayer Corporation - Poultry Business Unit, Evaluation of Competitive Exclusion culture in Turkey Poults. May 1998, \$2988.

Bayer Corporation - Poultry Business Unit, Evaluation of Competitive Exclusion culture in Turkey Poults. February 1998, \$2988.

USDA Subgrant, Biomedical Development Corp, San Antonio, TX, An Improved Sanitizer for Grade A Shell Eggs, August 1997, \$16,519.

Bayer Corporation - Poultry Business Unit, Evaluation of Competitive Exclusion culture in Turkey Poults. June 1997, \$1992.

NIH - SBIR grant with Biomedical Development Corp, San Antonio, TX, Evaluation of a Peroxidase Catalyzed Sanitizer for Egg Shells. October, 1995, \$31,856.

USDA - Pesticide Impact Assessment Program (Smith-Lever funds), A Survey of Pesticide Practices of the Texas Poultry Industry, July, 1995, \$24,000.

Texas Broiler Council, Evaluation of Nutrient Content of Broiler Litter, January 1994, \$4000

Cantrell Equipment Company, Inc. Development of software for maintenance, operation and fault diagnosis of an automated gizzard harvester. June, 1991 \$10,925.

Pilgrim's Pride Corporation, Development of software to predict broiler body weights. April, 1990, \$8050.

North Carolina Alternative Energy Corporation, Educational programs to assist in the

adoption of fluorescent lighting technology, March 1986, \$35,188.

Donations of hatching eggs at Piedmont Research Station, Salisbury, NC, valued at \$12,000 annually 1982 - 1989. Additional equipment and support total approximately \$15,000.

PROFESSIONAL SERVICE

Texas Cooperative Extension

Co-leader, Performance Appraisal System Specialist/Associate/Assistant Task Force, 2000

Leader, Associate Department Head / Extension Program Leaders group, 1995

Member, Agriculture Competitiveness Initiative team, 1997

Texas Commercial Egg Clinic, Program Chair, 1991 – 2006

Texas Broiler Symposium, Program Chair, 1994 – 2006

Department of Poultry Science

Poultry Physiologist Search Committee, 2006

Poultry Production Extension Specialist Search Committee, Chair, 2005

Poultry Processing Extension Specialist Search Committee, Chair, 2004

Farm Facility Use Committee, 2003 – present

Distance Education Committee, 2001 - present

Faculty Advisory Committee – 1998 – present

Curriculum Committee, 1996 – present

Poultry Extension Specialist Search Committee, Chair, 1994

Poultry Nutritionist Search Committee, 1993

Poultry Extension Specialist Search Committee, Chair, 1991

TAMU College of Agriculture and Life Sciences

Peer Review Committee for Promotion and Tenure, 1995.

Vice Chancellor's Awards in Excellence committee, 1993-1995.

Food Science and Technology Faculty, member 1991 – present.

Poultry Science Association

First Vice President, 2006

Second Vice President, 2005

Member, Ad Hoc HighWire Press Committee, 2004 - 2005

Board Member USA branch of World Poultry Science Association 2004 - 2006

Program Chair, Poultry Science 2004 annual meeting (Combined with ASAS and ADSA)

Section Editor, Poultry Science Environment, Management and Behavior Section 2002 – Present

Associate Editor, Poultry Science Environment and Management Section 1989-1993, 1999-2004.

Associate Editor, Journal of Applied Poultry Research, 1992-Present.

Chair, Membership Committee, 2000-2002.

Chair, Careers Committee, 1997-1998.

Chair, Welfare Research Award Committee, 2000-2001, member 2005-present

Member, Animal Welfare Committee, 2001 – 2004

Member, Nominating Committee, 1999-2001.

Section chair, Environment and Management, 1992

Annual meeting host committee member, 1976, 1984, 1991

External (University related)

Member, Departmental Review Team, University of Arkansas, Department of Poultry Science, 2005

Member, CREES Departmental Review Team, Auburn University, Department of Poultry Science, 2004

Member, CREES Departmental Review Team, University of Georgia, Department of Poultry Science, 2002

National Egg Quality School board member, 2002 – 2004. Host committee chair, 2003.

Poultry Extension Specialists Triennial workshop program chair, 2002 – 2005.

National Egg Temperature Assessment Project team member, 2002 – 2005.

National Poultry Waste Management Symposium program committee, 1999 – present. Poster Session co-chair 2000, 2002. General session committee 2004 and 2006.

National Retail Egg Quality Study team member, 1998

Reviewer of numerous USDA, BARD, FDA and TAMU research proposals.

External (Not University related)

Lake 'O the Pins TMDL stakeholders committee, 2005 - present

Peach Creek TMDL stakeholders committee, 2003 - present

Agriculture Policy Board Ad-Hoc Advisory Committee member, 2002 - 2005
Established by the Texas Legislature in 2001, the Agriculture Policy Board consists of Agricultural leadership from both legislative bodies and the Commissioner of Agriculture.

Piney Woods RC&D Broiler Litter Utilization Project team member, 2002 – present.

Texas Commission on Environmental Quality, Agriculture Stakeholders Advisory Committee member, 1996 – present.

Board Member and Advisor

Texas Poultry Federation, Texas Broiler Council, Texas Egg Council,
Texas Allied Poultry Association, Texas Poultry Improvement Association

Chair, Texas Poultry Improvement Board, 2006 – present

PROFESSIONAL, SCIENTIFIC AND HONOR SOCIETY MEMBERSHIP

Honorary Societies:

Phi Kappa Phi
Alpha Zeta
Gamma Sigma Delta
Epsilon Sigma Phi

Professional Organizations:

World Poultry Science Association
Poultry Science Association
Texas Poultry Federation

CIVIC AND COMMUNITY SERVICE ACTIVITIES

A&M Consolidated High School Band Boosters, Scholarship selection committee, 2005 – present.

Chairman of Administrative Board, A&M United Methodist Church, College Station, TX, 1992-1993. Church membership of over 1800, annual budget of over \$750,000.

Millican United Methodist Church, Millican, TX, 1995 - 1999, Organist, Sunday School teacher, Trustee and Administrative Board member.

Kosse First United Methodist Church, Kosse, TX, 2000 - 2003, Pianist, Choir member, Sunday School teacher.

First United Methodist Church of Waller, Waller, TX, 2003 – 2005, Pianist, Choir member, Sunday School teacher.

Boy Scouts of America, Troop 802, 1989 - 1993, 1997-2003. Active adult leader involved in wide variety of troop functions and training of boy scouts.

AWARDS AND RECOGNITION

Poultry Science Association, Phibro Extension Award, 2001. This is the highest national award given to Poultry Extension Specialists.

Texas Natural Resource Conservation Commission, Texas Environmental Excellence Award Finalist in Agriculture Division, 2000 and 2002.

American Egg Board Research Award, Presented for research manuscript from M. S. research of J. F. Prochaska, 1997.

Texas Poultry Federation award for recognition of leadership in the development of the Texas Avian Influenza Monitoring plan, 1995.

Poultry Science Association Recruiting award, 1994.

PSA
Seven graduate student presentations have been awarded certificates of excellence at
and SPSS meetings. Craig Coufal received PSA Alltech Student Manuscript award for
publication of dissertation research, 2006.

PUBLICATIONS AND RELATED ACTIVITIES - Summary

Refereed Publications - 44

Extension publications - 56

Proceedings - 40

Invitational papers presented (not otherwise listed in previous categories) - 39

Abstracts - 109

Computer Software - 11

PUBLICATIONS AND RELATED ACTIVITIES – Complete Citations

Refereed publications (44)

- Coufal, C. D., C. Chavez, P. L. Niemeyer, and J. B. Carey, 2006. Nitrogen Emissions from Broilers Measured by Mass Balance Over Consecutive Flocks. *Poultry Science* 85:384-391.
- Coufal, C. D., C. Chavez, P. L. Niemeyer, and J. B. Carey, 2006. Effects of Top-Dressing Recycled Broiler Litter on Litter Production, Litter Characteristics and Nitrogen Mass Balance. *Poultry Science* 85:392-397.
- Coufal, C. D., C. Chavez, P. L. Niemeyer, and J. B. Carey, 2006. Measurement of Broiler Litter Production Rates and Nutrient Content Using Recycled Litter. *Poultry Science* 85:398-403.
- Chavez, C., C. D. Coufal, P. L. Niemeyer, J. B. Carey, R. E. Lacey, R. K. Miller, and R. C. Beier, 2004. Impact of Dietary Supplemental Methionine Sources on Sensory Measurement of Odor Related Compounds in Broiler Excreta. *Poultry Science* 83:1655-1662.
- Lacey, R. E., S. Mukhtar, J. B. Carey and J. L. Ullman, 2004. A Review of Literature Concerning Odors, Ammonia and Dust From Broiler Production Facilities: 1. Odor Concentrations and Emissions. *Journal of Applied Poultry Research* 13:500-508.
- Carey, J. B., R. E. Lacey and S. Mukhtar, 2004. A Review of Literature Concerning Odors, Ammonia and Dust From Broiler Production Facilities: 2. Flock and House Management. *Journal of Applied Poultry Research* 13:509-513.
- Mukhtar, S., J. L. Ullman, J. B. Carey and R. E. Lacey, 2004. A Review of Literature Concerning Odors, Ammonia and Dust From Broiler Production Facilities: 3. Land Application, Processing and Storage of Broiler Litter. *Journal of Applied Poultry Research* 13:514-520.
- Ullman, J. L., S. Mukhtar, R. E. Lacey and J. B. Carey, 2004. A Review of Literature Concerning Odors, Ammonia and Dust From Broiler Production Facilities: 4. Remedial Management Practices. *Journal of Applied Poultry Research* 13:521-531.
- Carey, J. B. 2004. Nuisance and Odor Issues in Broiler Production: A Case Study. *Journal of Applied Poultry Research*, 13:146-148.
- Chavez, C, C. D. Coufal, R. E. Lacey and J. B. Carey, 2004. The Impact of Methionine Sources on Poultry Fecal Matter Odor Volatiles. *Poultry Science* 83:359-364.

- Chavez, C. C. D. Coufal, J. B. Carey, R. E. Lacey, R. K. Beier, and J. A. Zahn, 2004. The Impact of Supplemental Dietary Methionine Sources on Volatile Compound Concentrations in Broiler Excreta. *Poultry Science* 83:901-910.
- Coufal, C. D., C. Chavez, K. D. Knape, and J. B. Carey, 2003. Evaluation of a method of ultraviolet light sanitation of broiler hatching eggs. *Poultry Science* 82:754-759.
- Chavez, C., K. D. Knape, C. D. Coufal, and J. B. Carey, 2002. Reduction of eggshell aerobic plate counts by ultraviolet irradiation. *Poultry Science* 81:1132-1135.
- Knape, K. D. C. Chavez. R. P. Burgess, C. D. Coufal and J. B. Carey, 2002. Comparison of Egg Shell Surface Microbial Populations for In-Line and Off-Line Commercial Egg Processing Facilities. *Poultry Science* 81:695-698.
- Redwine, J. S., R. E. Lacey, S. Mukhtar, and J. B. Carey, 2002. Concentration and Emissions of Ammonia and Particulate Matter in Tunnel Ventilated Broiler Houses Under Summer Conditions in Texas. *Transactions of the ASAE*. 45(4):1101-1109
- Knape, K. D., J. B. Carey, and S. C. Ricke, 2001. Response of Foodborne Salmonella spp. Marker Strains Inoculated on Egg Shell Surfaces to Disinfectants in a Commercial Egg Washer. *J. Environ. Sci. Health*, B36(2), 219-227.
- Bell, D. D., P. H. Patterson, K. W. Koelkebeck, K. E. Anderson, M. J. Darre, J. B. Carey, D. R. Kuney, and G. Zeidler, 2001. Egg Marketing in National Supermarkets: Egg Quality - Part 1. *Poultry Science* 80:383-389.
- Patterson, P. H., K. W. Koelkebeck, D. D. Bell, J. B. Carey, K. E. Anderson, and M. J. Darre, 2001. National Retail Egg Quality Study: Specialty Eggs – Part 2. *Poultry Science* 80:390-395.
- Koelkebeck, K. W., D. D. Bell, J. B. Carey, K. E. Anderson, and M. J. Darre, 2001. Egg Marketing in National Supermarkets: Products, Packaging and Prices – Part 3. *Poultry Science* 80:396-400.
- Shafer, D. J., R. P. Burgess, K. A. Conrad, J. F. Prochaska and J. B. Carey, 2001. Characterization of Alkaline Hydroxide Preserved Whole Poultry as a Dry By-Product Meal. *Poultry Science* 80:1543-1548.
- Kuo, F.-L., Y. M. Kwon, J. B. Carey and S. C. Ricke, 2000. Current Concepts in Antibacterial Compounds for Sanitizing Hatching Eggs – A Review. *Recent Research Developments in Microbiology*. 4:371-385.

- Ryan, L. L., J. B. Carey and S. G. Birkhold., 2000. Economic Impact of the Broiler and Egg Industries in Texas. *Journal of Applied Poultry Research*, 8:447-451.
- Knape, K. D., J. B. Carey and S. C. Ricke, 2000. Comparison of chlorine with an Iodine-based Compound on Eggshell Surface Microbial Populations in a Commercial Egg Washer. *Journal of Food Safety*, 19 (3): 185-194.
- Shafer, D. J., J. B. Carey and R. P. Burgess, 2000 Chemical Preservation of Whole Broiler Carcasses utilizing Alkaline Hydroxides. *Poultry Science* 79:1517-1523.
- McKee, S. R., Y. M. Kwon, J. B. Carey, A. R. Sams and S. C. Ricke, 1998. Comparison of a Peroxidase-Catalized Sanitizer with Other Egg Sanitizers Using a Laboratory-Scale Sprayer. *J. of Food Safety* 18:173-183.
- Burgess, R. P., J. B. Carey and D. J. Shafer, 1998. Research Note: The Impact of pH on Nitrogen Retention in Laboratory Analysis of Broiler Litter. *Poultry Science* 77:1620-1622.
- Shafer, D. J. , J. B. Carey, J. F. Prochaska and A. R. Sams. 1998. Dietary Methionine Intake Effects on Egg Component Yield, Composition and Functionality. *Poultry Science* 77:1056-1062.
- Kuo, F. L. , J. B. Carey, and S. C. Ricke, 1997. UV Irradiation of Shell Eggs: Effect on Populations of Aerobes, Molds and Inoculated *Salmonella typhimurium*. *J. of Food Protection*, 60:639-643.
- Kuo, F. L. , S. C. Ricke, and J. B. Carey, 1997. Shell Egg Sanitation: UV Radiation and Egg Rotation to Effectively Reduce Populations of Aerobes, Yeasts, and Molds. *J. of Food Protection*, 60:694-697.
- Kuo, F. L. , Y. M. Kwon, J. B. Carey, B. M. Hargis, D. P. Kreig, J. H. Kessler, and S. C. Ricke, 1997. Reduction of *Salmonella* Contamination of Chicken Egg Shells by a Peroxidase-Catalized Sanitizer. *J. Food Science*, 62(4):873-874.
- Prochaska, J. F. , J. B. Carey, and D. J. Shafer, 1996. The Effect of L-Lysine Intake on Egg Component Yield and Composition in Laying Hens. *Poultry Science* 75:1268-1277.
- Shafer, D. J. , J. B. Carey, and J. F. Prochaska, 1996. Effect of Dietary Methionine Intake on Egg Component Yield and Composition. *Poultry Science* 75:1080-1085.
- Kwon, Y. M. , D. P. Kreig, F.-L. Kuo, J. B. Carey, and S. C. Ricke, 1996 Biocidal Activity of a Peroxidase-Catalyzed Sanitizer Against Selected Bacteria on Inert Carriers and Egg

Shells. *J. Food Safety* 16:243-254.

Kuo, F. L. , J. B. Carey, S. C. Ricke, and S. D. Ha, 1996. Peroxidase Catalyzed Chemical Dip, Egg Shell Surface Contamination, and Hatching. *Journal of Applied Poultry Research* 5:6-13.

Carey, J. B. , F. L. Kuo and K. E. Anderson, 1995. Effects of cage population on the productive performance of layers. *Poultry Science* 74:633-637.

Carey, J. B. and B. L. Lassiter, 1995. Age at final beak trim influences on the productive performance of commercial layers. *Poultry Science* 74:615-619.

Ha, S. D., S. C. Ricke, J. B. Carey and J. H. Denton, 1995. Comparison of interior coatings for the control of surface microbial contamination in a simulated poultry processing plant environment. *Journal of Applied Poultry Research* 4:7-12.

Ha, S. D., S. C. Ricke, J. B. Carey and J. H. Denton, 1995. Recovery and origin of subsurface microbiological contamination from an acrylic latex coating in a simulated poultry processing plant environment. *Journal of Applied Poultry Research* 4:1-6.

Jones, F. T., D. V. Rives and J. B. Carey, 1995. *Salmonella* contamination in commercial eggs and an egg production facility. *Poultry Science* 74:753-757.

Carey, J. B., 1990. Influence of age at final beak trimming on pullet and layer performance. *Poultry Science* 69:1461-1466.

Carey, J. B., 1987. The effects of pullet stocking density on the performance of laying hens. *Poultry Science* 66:1283-1287.

Carey, J. B., A. W. Adams, and K. E. Kemp, 1985. Cage type effects on feeding activity of three commercial strains of egg-type chickens. *Poultry Science*. 65:845-849.

Carey, J. B., 1982. Effects of cage type and feeding level on laying performance and feeding behavior of several commercial strains of egg-type chickens. Ph.D. Dissertation, Kansas State University, Manhattan, KS.

Carey, J. B. , 1979. Response of strain to amino acid supplementation and lysine requirements in low protein layer diets. M.S. Thesis, South Dakota State University, Brookings, SD.

Extension publications (56)

Carey, J. B., 2004. Economic Impact of the Texas Poultry Industry. TCE Publication L-5214.

- Mukhtar, S., J. B. Carey and R. E. Lacey, 2001. Managing Nuisance Odor and Dust from Poultry Growing Operations. TAEX Publication L-5401.
- Carey, J. B., and numerous poultry industry personnel, 2001. Memorandum of Understanding Implementing the Assessment for Emergency Avian Influenza and Velogenic (Exotic) Newcastle Funds, June 2001.
- Carey, J. B., R. E. Lacey and S. Mukhtar, Study of Odors and Arsenic Emissions From Poultry Growing Operations, Final Report for TNRCC contract 582-0-81252, Nov. 2,2000.
- Carey, J. B., A. L. Cartwright and S. G. Birkhold, Poultry Q&A, TAEX publication L-5323, July 1999.
- Feagley, S., J. B. Carey, and B. Auverman. Poultry Waste Management Handbook, Texas Agricultural Extension Service, Soil and Crop Sciences Program Unit Publication, January 1999
- Carey, J. B. and F. D. Thornberry, Dead Poultry Disposal, TAEX Publication L-5217, September 1998.
- Carey, J. B., F. D. Thornberry and S. A. Reeves, 1998. Poultry waste management handbook, Second edition, Texas Agricultural Extension Service, Poultry Program Unit publication, June 1998
- Carey, J. B., S. G. Birkhold and L. L. Ryan, Economic Impact of the Texas Poultry Industry. TAEX Publication L-5214, July 1998.
- Carey, J. B. Biosecurity Workshop Handbook. Prepared for the Indiana State Poultry Association Biosecurity Workshops, April 20 & 22, 1998, pg 1-43
- Hall, K. D., R. D. Holloway, J. B. Carey and C. E. Holescher, Texas Poultry Pest-Control Practices. TAEX publication B-6065, September 1997.
- Carey, J. B., J. F. Prochaska and J. S. Jeffrey, Poultry Facility Biosecurity. TAEX publication L-5182. Texas Agricultural Extension Service, August 1997.
- Carey, J. B., 1995 Biosecurity guidelines for poultry producers. Poultry Program Unit publication., English and Spanish translations, February 1995.
- Carey, J. B., and numerous poultry industry personnel, 1995. Memorandum of Understanding to prevent the Introduction of Avian Influenza into Texas, June 1995.
- Reeves, S. A., J. B. Carey and F. D. Thornberry, 1994. Poultry waste management handbook,

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Computer Software (11)

Broiler Placement Schedule - An extensive spreadsheet to project and schedule broiler placements for a 1.2 million bird per week processing facility.

GIZMO - A hypertext computer program for maintenance and operation of a gizzard harvesting machine.

PARTS-PRO - A decision making system for poultry processing facilities based on management science techniques.

EGGBERT - A prototype hypertext system for embryology education of school children.

Poultry House Investment Analysis - A software package to examine the economic feasibility of contract poultry production.

Egg Supply Calendar - A template to predict egg production from various layer flocks.

Minimum Feed Intake Calculator - A template to calculate feed intake levels necessary to meet nutrient requirements of poultry.

Feed Specification Calculator - A template to calculate necessary diet nutrient levels to achieve recommended nutrient intake of poultry.

Poultry projection system - A system to project egg and chick production from large numbers of laying flocks.

Data management system - A system to collect, summarize and store production and quality data from as many as 500 experimental units.

Expert system for poultry cutting machine - A prototype system for fault diagnosis and maintenance of an automated poultry cutting machine.

Quality assurance data collection system - A prototype system for collection and statistical analysis of quality assurance factors in poultry processing.