

## **Sheila E. Purdum, Ph.D.**

**Current Title:** Professor and Extension Poultry Specialist

**Appointment:** Extension 50%, Research 45% and Teaching 5%

**Present Academic Rank:** Full Professor, July 1999

### **EDUCATION**

Ph.D. in Animal Nutrition, Iowa State University, 1986

Master of Science in Animal Nutrition, University of Nebraska – Lincoln, 1982

Bachelor of Science in Animal Science, University of Nebraska – Lincoln, 1981

### **PROFESSIONAL EXPERIENCE**

Professor Animal Science and Extension Poultry Specialist University of Nebraska – Lincoln	July 1999 to present
Interim Dept. Head, Animal Science University of Nebraska – Lincoln	August 2007 to August 2009
Extension Poultry Specialist and Associate Professor University of Nebraska – Lincoln	September 1992 to June 1999
Extension Poultry Specialist and Associate Professor North Carolina State University, Raleigh, NC	July 1992
Extension Poultry Specialist and Assistant Professor North Carolina State University, Raleigh, NC	1986 - 1992
University of Nebraska – Lincoln Committees: Academic Planning Committee (2017-2019); Faculty Senate (1994-2020); ARRC Panel (1998-2000, 2012-2016); IANR Extension Tenure Committee (2016-2018).	

### **HONORS & AWARDS**

Poultry Science Association Informal Nutrition Conference Life Mentor Recognition, 2023

American Egg Board Research Award 2019

Award for Excellence in MultiState Research – “Poultry Production Systems and Well-Being:  
Sustainability for Tomorrow”, 2019

IANR and CASNR Holling Family Award for Teaching Excellence, 2013

IANR Darrell W. Nelson Excellence in Graduate Student Advising Award, 2011

Nebraska Poultry Industry Hall of Fame Award, 2008

Poultry Science Association Helene Cecil Leadership Award, 2007  
Lancaster County Heart of 4-H Volunteer Award, 2006  
IANR Omtvedt Innovation Award, 2004  
Epsilon Sigma Phi Certificate of Achievement for 10 years service, 2002  
Poultry Science Association AFIA Nutrition Research Award, 2000

### **PROFESSIONAL ACTIVITIES**

National Academy of Sciences Nutrient Requirements of Poultry Sub-Committee (2017-2023)  
Midwest Poultry Federation Program Education Program Coordinator, 1993-2008, Nutrition Symposium 1996-2017  
Poultry Science Journal Nutrition and Metabolism Section Editor - 1<sup>st</sup> term (1999-2002); 2<sup>nd</sup> term (2002-2005)  
Poultry Science Associate Editor 1992-1998  
Poultry Science Association Board of Directors (1997- 2000)  
World Poultry Science Association Director (2000 - 2003)  
Ex-Officio Director for Nebraska Poultry Industries  
Program Section Chair for PSA 1994 Environment and Management Section

### **Mentor for students in Poultry Science (Association and career field)**

Ms. Ellie Dearmont, Smartchicken, Waverly, NE  
Ms. Carrie McFarland – H & N Breeders, Bloomfield, NE.  
Ms. Jody Ash – Cobb-Vantress Breeder Company, South Africa  
Ms. Leanne LaBrash – University of Saskatchewan, Canada  
Ms. Trish Weber – TW Trucking, Purdum, NE.  
Dr. Divya Jaroni, Oklahoma State Univ., Stillwater, OK  
Dr. Necmettin Ceylan, Ankara University, Ankara, Turkey  
Dr. Curtis Novak – Land of Lakes Purina Feed, Kansas City, MO.  
Dr. Haithem Yakout – Biomin, USA  
Dr. Uaichai Puthongsiriporn – Nutritionist, C.P. Group in Bangkok, Thailand  
Dr. Mohammed Jalal – University of Jordan, Amman, Jordan  
Dr. Mahmoud Masadeh – Devenish Nutrition, Dallas, TX  
Dr. Alia Aljamal – Zinpro, Dallas TX  
Dr. David Monsalve, Hills Nutrition, Topeka, KS.  
Dr. Dana Hahn Didde, MBA Poultry, Waverly, NE  
Dr. Pradeep Krishnan, Nutritionist, Bangalore, India  
Dr. Rashid Allotan, Professor, Univ. Jordan, Amman, Jordan  
Dr. Aladein Allohotan, Professor, King Saud University, Saudi Arabia  
Mr. Brett Kreifels, UNL Extension, Cass Co., Papillion, NE.  
Dr. Pamela Eusebio-Balzacar, Goldsboro Milling, North Carolina  
Ms. Kelli Martin, Ames, IA  
Ms. Ashley Biggee, UNL Ph.D. student  
Ms. Josephine Foley, M.S.; UNL technician  
Ms. Dani-el Hanna, Vet Tech, Bahamas

## PATENTS

Patent #5,897,890 “*A Feeding Program for the Production of Omega-3 Fatty Acid Enriched Eggs.*” Exclusive license to Michael Foods for further processed egg products. Numerous carton egg products utilizing technology for production of “Omega” Eggs.

Patent #6,649,201 “*Eggshell Derived Monocalcium and Dicalcium Phosphate*”, short-term discovery license to Rembrandt Industries, Rembrandt, Iowa.

## EXTENSION YOUTH ACTIVITIES

Nebraska 4-H State Poultry Judging Contest	1993-2023
Nebraska State Fair 4-H Poultry Show Superintendent	2011-2014
Nebraska State FFA Contest, Poultry Management Coordinator	1993-2023
Lancaster/Otoe County 4-H Leader	2001-2023
Ex-Officio Nebraska Poultry Industries	1993-2023

## *Refereed Journal Articles: (Since 2000)*

Bigge, A., K. Hanford and **S. Purdum**. 2023. Comparison of electrocardiogram parameters during two methods of euthanasia in white leghorn hens. *Research in Veterinary Science* Vol. 156:54-59.

Foley, J. and **S. Purdum**, 2022. Effects of tributeryn on performance parameters and nutrient digestibility in older White Leghorn hens. *Poultry*, MDPI, Basel, Switzerland in review

Nolasco, E., J. Yang, O. Ciftci, D.C. Vu, S. Alvarez, **S. Purdum** and K. Majumder, 2021. Evaluating the effect of cooking and gastrointestinal digestion in modulating the bio-accessibility of different bioactive compounds in eggs. *Food Chem.*, 344:128623

**Purdum, S.E.**, P. Eusebio and K. Hanford, 2021. The effects of two genetic lines on spatial distribution and use and preference of perch and nest area in an aviary system. *Poultry Sci.* 7587846.

Bigge, A., A. Reisbig, **S. Purdum**, D. Pathak and K. Hanford, 2019. Heart rate variability patterns as indicators of stress and welfare in Leghorn hens: a comparative housing system study. *ISAE Proceedings of the 53<sup>rd</sup> Congress*, Bergen, Norway, Wageningen Academic Publishers, p. 159.

Bigge, A., **S. Purdum** and K. Hanford, 2018. Effect of xylanase on the performance of laying hens fed a low energy corn and soybean meal diet. *Poultry Sci*, 97:2182-2187.

Eusebio-Balcazar, P.E., **S. Purdum**, K. Hanford and M.M. Beck. 2018. Limestone particle size fed to pullets influences subsequent bone integrity of hens. *Poultry Science*. 93:1471-1483.

Martin, K.M., N Vargas-Juardo, **S.E. Purdum**, 2017. Prediction model for manure zinc excretion in laying hens. *Poultry Sci.*, pex295. *Poultry Science*, pex295, <https://doi.org/10.3382/ps/pex295>. Published: 25 October 2017.

Hahn-Didde, D. and **S.E. Purdum**, 2016. Prebiotics and probiotics used alone or in combination and effects on pullet growth and intestinal microbiology. *J. Appl. Poult. Res.* 25 (1), 1-11.

Reisbig, A., **S. Purdum** and M. Erasmus, 2016. The impact of familiar and unfamiliar conspecific airings on heart rate variability of female white leghorns. *Proc. Of the 50<sup>th</sup> Congress of the International Society for Applied Ethology*, Wageningen Academic Publishers, 2016 edition, pp. 422.

A.A. Aljamal, S.E. **Purdum** and K.J. Hanford, 2014. The Effect of Normal and Excessive Supplementation of Selenomethionine and Sodium Selenite in Laying Hens, *International Journal of Scientific Research, Biological Horizon*, ISSN:2222-1255.

**Purdum, S.E.**, B. Kreifels, and K. Hanford, 2014. Short-term effects of lower oil dried distillers grains with solubles in laying hen rations. *Poultry Science*, 93 (10) 2592-2595.

Hahn-Didde, D. and **S E. Purdum**, 2014. The effects of an enzyme complex in moderate and low nutrient-dense diets with dried distillers grains with solubles in laying hens. *The Journal of Applied Poultry Research* 2014 23: 23-33.

Masa'deh, M.K. **S. E. Purdum** and K. J. Hanford, 2012. Distillers dried grains with solubles in pullet diets *J Appl Poult Res* 2012 21:531-539.

Masadeh, M.K., **S.E. Scheideler** and K.J. Hanford, 2011. Dried distillers grains with soluble in laying hen diets. *Poultry Science*, 90:1960-1966.

**Scheideler, S.E.**, P. Weber and D. Monsalve., 2010. Supplemental vitamin E and selenium effects on egg production, egg quality, and egg deposition of a-tocopherol and selenium. *J. Appl. Poultry Res.*, 19:354-360.

Elnagar, S. A., **S.E. Scheideler**, and M.M. Beck, 2010. Reproductive hormones, hepatic deiodinase messenger ribonucleic acid and vasoactive intestinal polypeptide-immunoreactive cells in hypothalamus in the heat stress- induced or chemically induced hypothyroid laying hen. *Poultry Sci.* 89:2001-2009.

Hammons, S., Lyn Oh, P., Martinez, I., Clark, K., Schlegel, V., Sitoriu, E., **Scheideler, S.E.**, and Walter, J., 2010. A small variation in diet influences the *Lactobacillus* strain composition in the crop of broiler chickens. *Systematic and Applied Microbiology.* 33:275-281.

**Scheideler, S.E.**, R.E. Hileman, T. Weber, L. Robeson and G.F. Hartnell, 2008. The In-vivo Digestive Fate of the Cry3Bb1 Protein in Laying Hens fed Diets Containing MON 863 Corn. *Poultry Sci.* 87:1089-1097.

**Scheideler, S.E.**, D. Rice, B. Smith, G. Dana and T. Sauber, 2008. Evaluation of Nutritional Equivalency of Corn Grain from DAS-01501-1 (Herculex\* I) in the Diets of Laying Hens. *J. Applied Poultry Res.* 17:1-7.

Jalal, M.A., **S.E. Scheideler** and E.M. Pierson, 2007. Strain response of laying hens to varying dietary energy levels with and without Avizyme supplementation. *J. Appl. Poultry Res.* 16:289-295.

Novak, C., H. Yakout and **S.E. Scheideler**, 2006. The effect of dietary protein level and TSAA:Lysine ratio on egg production parameters and egg yield. *Poultry Sci.*, 85:2195-2206.

Jalal, M., M. Beck, D. Marx and **S. E. Scheideler**, 2006. Effects of bird cage space and dietary metabolizable energy level on production parameters in laying hens. *Poultry Science* 85:306-311.

LaBrash, L. and **S. E. Scheideler**, 2005. Farm feather condition score survey of commercial laying hens. *J. Applied Poultry Research* 14:740-744.

Puthongsiriporn, U., **S. Scheideler** and M. Beck, 2005. Effects of dietary ratio of linoleic to linolenic acid on performance, antibody production, in vitro and lymphocyte proliferation in two strains of Leghorn pullet chicks. *Poultry Science* 84:846-857.

**Scheideler, S. E.**, M. M. Beck, A. Abudabos and C. L. Wyatt, 2005. Multi-enzyme supplementation of corn-soy based layer diets. *J. of Applied Poultry Research* 14:77-86.

Hansen, K. K., M. M. Beck, **S. E. Scheideler**, and E. E. Blankenship, 2004. Exogenous estrogen boosts circulating estradiol concentrations and calcium uptake by duodenal tissue in heat-stressed hens. *Poultry Science* 83:895-900.

Ash, J., C. Novak, and **S. E. Scheideler**, 2003. The fate of genetically modified protein from Roundup Ready Soybeans in the laying hen. *J. Applied Poultry Science* 12:242-245.

Ceylan, N., **S. E. Scheideler**, and H. L. Stilborn, 2003. High available phosphorus corn and phytase in layer diets. *Poultry Science* 82:789-795.

**Scheideler, S. E.**, M. M. Beck, A. Abudabos, and C. L. Wyatt, 2003. Multi-enzyme supplementation of corn-soy based layer diets. Accepted by *J. Applied Poultry Research*.

Kirunda, D.F.K., **S. E. Scheideler**, and S.R. McKee, 2001. The efficacy of vitamin E (dl- $\alpha$ -tocopherol acetate) supplementation in hen diets to alleviate egg quality deterioration associated with high temperature exposure. *Poultry Sci.* 80:1378-1383.

Puthongsiriporn, U., **S. E. Scheideler**, J. L. Sell, and M. M. Beck, 2001. Effects of vitamin E and C supplementation on performance and immune and antioxidant status of laying hens during heat stress. *Poultry Sci.* 80:1190-1200.

Jalal, M., and **S. E. Scheideler**, 2001. Effect of phytase supplementation on egg production parameters and amino acid digestibilities. *Poultry Sci.* 80:1463-1471.

Novak, C., and **S. E. Scheideler**, 2001. Long-term effects of feeding flaxseed-based diets. 1. Egg production parameters, components, and eggshell quality in two strain of laying hens. *Poultry Sci.* 80:1480-1489.

**Scheideler, S. E.**, and P. R. Ferket, 2000. Phytase in broiler rations - Effect on carcass yields and incidence of tibial dyschondroplasia. *J. Appl. Poultry Res.* 9:469-475.

Lewis, N., K. Schalch, **S. Scheideler**, 2000. Serum lipid response to n-3 fatty acid enriched eggs in persons with hypercholesterolemia. *J. Amer. Dietetic Ass.* 100:365-367.

### **Abstracts (since 2010)**

Bigge, A., S. Purdum and K. Hanford, 2023. Determination of sex before hatch using electrocardiogram and other incubation parameters. *Poultry Sci. Abstract*, presented at the 2023 Poultry Science Association Meetings, Philadelphia, PA.

Foley J., S. Purdum and M.F. Wilken. 2022. New generation high protein dried distillers grain in White Leghorn laying hen diets. *Poultry Science Vol. 101 (E – Suppl.1)*

Bigge A., J. Foley and S. Purdum. 2022. Development and publication of interactive online poultry embryology education modules. *PSA Abstracts Poultry Sci. Vol 101 (E- Suppl. 1)*

Bigge, A., C. Kreikemeir-Bower, A. Reisbig, K. Hanford and **S. Purdum**. 2020. Comparison of electrocardiogram parameters during two methods of euthanasia in white leghorn hens. *Poultry Sci. Addendum*, p. 8.

Dearmont, E., K. Hanford and **S. Purdum**, 2020. The effect of a symbiotic applied as a coarse spray at the hatchery versus early drinking water application on broiler chick performance and intestinal morphology. *Poultry Sci 99 Addendum*, p. 87.

Hanna, Dani-el, **S. Purdum** and N. Vargas-Jurado, 2019. Effects of butyric acid on performance parameters, egg quality and nutrient utilization in young white leghorn hens. *Poultry Science Addendum*, IPSF, Atlanta, GA, February, 11-12, 2019

Foley, J., R. Sedlacek, N. Vargas-jurado and **S. Purdum**, 2019. Effectiveness of canola meal on n-3 fatty acid deposition in breast and thigh meat of broiler chickens. *Poultry Sci. Addendum*, IPSF, Atlanta, GA., February, 11-12, 2019

Nolasco, E., **S. Purdum** and K. Majumder, 2019. Evaluating the efficacy of whole cooked enriched eggs in modulating the health beneficial biological activity. *Poultry Science Association Annual Meeting, PS Addendum 579P*, pg. 131. July 15-18, Montreal, Canada.

Nolasco, E., **S. Purdum** and K Majumder. 2019. Evaluating the efficacy of whole cooked enriched eggs for the prevention of hypertension associated vascular diseases. Institute of Food Technologists (IFT) Annual Meeting and Food Expo, 426, June 2-5, New Orleans, LA.

Bigge, A., **Purdum, S. E.**, Reisbig, A. Kreikemier, C. 2018. A comparison of two methods of small-scale euthanasia in white leghorn hens." Poultry Sci. 97: E-Supplement Abstracts.

Foley, J., K. Hanford and **S. Purdum**, 2017. Effectiveness of feed additives to improve shell quality in older laying hens. Poult. Sci. 96(E-Suppl. 1), P265.

Martin, K., and **S.E. Purdum**, 2016. The effects of zinc supplementation from 2 sources on egg quality and bone health in laying hens., Poultry Science 95 (E-Supple. 1).

Hanna, Dani-el and **S.E. Purdum**, 2016. Measuring stress and welfare of laying hens in aviary and conventional cages. Poultry Science 95 (E-Supple. 1), p. 42.

Bigge, A., Hanford, K., **S.E. Purdum**, 2016. Effect of NSP-degrading enzyme on the performance of laying hens. Poultry Sci., 95 (E-Suppl1), p. 281-282.

Eusebio-Balcazar, P., and **S.E. Purdum**, 2016. Effects of limestone particle size and dietary phosphorus level for pullets on bone health and performance during lay, raised in deep litter systems. 95 (E-Suppl1) p. 276.

Eusebio-Balcazar, P., **S. Purdum**, K. Hanford, and M. Beck, 2015. Effect of pullet limestone particle size on performance and bone health of pullets and laying hens raised in deep litter systems. Poultry Science Abstract, IPPE, Atlanta, GA, January 26, 2015.

Bigge, A., **S. Purdum**, and P. Eusebio-Balcazar, 2015. Behavioral observations of White Leghorn laying hens in aviary versus cage systems. Poultry Science Abstract, IPPE, Atlanta, GA, January 26, 2015.

Eusebio-Balcazar, M. Beck, **S. Purdum**, 2014. Effects of limestone particle size in pullet diets on hen performance, bone mineral density and keel bone deformities in aviaries or conventional cages. International Poultry Scientific Forum, Jan. 27-28, 2014. Atlanta, GA.

**Purdum, S.**, D. Didde, B. Kreifels, P. Eusebio and K. Hanford. 2014. Effects of Two Xylanase enzyme sources on Laying Hen Performance fed low density diets from 22-52 weeks of age. T125, International Poultry Scientific Forum, p. 38-39, Jan. 27-28, 2014. Atlanta, GA.

Didde, D., B. Kreifels, **S. Purdum**, K. Hanford and S. Fernando, 2014. Prebiotics and probiotics, used alone or in combination and effects on pullet growth and intestinal microbiome. Poultry Sci. 93 (E Supplement), p. 79-80.

P.E. Eusebio-Balcazar, A. Ampaire, M.M. Beck and **S. Purdum**, 2013. Effects of limestone particle size on pullet growth and keel bone deformities raised in aviary or conventional cages. International Scientific Poultry Forum Abstracts, Poultry Sci. 92 (E- Supple 1) p. 201.

P.E. Eusebio-Balcazar, A. Ampaire, M.M. Beck and **S. Purdum**, 2013. Effects of dietary Ca and P levels on pullet growth performance and keel bone deformities raised in floor pens or conventional cages. International Scientific Poultry Forum, Abstracts, Poultry Sci. 92 (E-Supple 1) p. 254.

D. Didde, **S. Purdum** and K. Hanford, 2013. Examination of Salmonella spp. And E. coli spp in Cage and Cage Free Environments for Laying Hens, International Society for Applied Ethology Abstracts, Forianopolis, Brazil, June 2013. P. 143.

Eusebio-Balcazar, A. Steiner, M. Beck and **S. Purdum**, 2013. Perch usage and preference of Brown and White Laying hens housed in aviary systems. International Society for Applied Ethology Abstracts, Forianopolis, Brazil, June 2013. p.166.

A. Steiner, P.E. Eusebio-Balcazar, M. Beck and **S. Purdum**, 2013. Behavioral study and plumage conditions of laying hens housed in aviaries and conventional cages. Poultry Sci. 92 (E-Suppl. 1), p. 93.

P.E. Eusebio-Balcazar, A. Steiner, M. Beck and **S. Purdum**, 2013. Effect of dietary Ca and P levels on bone health and eggshell quality of laying hens housed in floor pens or cages. Poul. Sci. 92 (E-Suppl. 1), p. 95.

Eusebio-Balcazar, P.E. and **S. Purdum**, 2012. Effects of cage-free housing system on performance, egg quality, and bone health in White Leghorn laying hens. International Poultry Scientific Forum Abstracts, Atlanta, Georgia. p. 66.

Eusebio-Balcazar, P.E., D. Didde and **S. Purdum**, 2012. Nest box color and height preference of White Leghorn laying hens raised in floor pens. Proceedings of the 46<sup>th</sup> Congress of the International Society for Applied Ethology, p. 164

Clark, K.J., D. A. MacKenzie, M. G. Zeece, **S. Purdum**, N. Juge and J. Walter. 2011. Functional characterization of metagenomic enzymes from the chicken cecal microbiome. Institute of Food Research, BBSRC. London, England.

Aljamal, A. A., C.A. Fassbinder-Orth, K.J. Hanford, and **S.E. Scheideler**, 2011. The effect of selenomethionine vs. sodium selenite supplementation on vitelline membrane strength, glutathione peroxidase activity in the liver and magnum of laying hens and egg Se content when using a corn starch based diet. Poultry Sci. 90 (E-Suppl.1): 171.

Angel, C.R., **S. Purdum**, S.L. Vieira, M. Iwaniuk and N.E. Ward, 2011. Effects of a mono component protease on true ileal amino acid digestibility of selected ingredients for commercial laying hens. Poultry Sci. 90 (E-Suppl. 1): 139-140.

**Purdum, S.**, A. A. Aljamal, and P. Krishnan, 2011. The effects of using different levels and sources of zinc with wire vs. solid sided cages on laying hen feather quality. Proc. Of the 45<sup>th</sup> Congress of the International Society for Applied Ethology, p. 124.



Weber, P. and **S.E. Scheideler**, 2010. The effects of social and environmental enrichments on the welfare of tom turkeys. 44<sup>th</sup> Congress of the ISAE, Uppsala, Sweden Wagening Acad. Publishers, Wagening, Netherlands. P. 222.

Krishnan, P. and **S.E. Scheideler**, 2010. Effect of choline, folacin and vitamin B-12 on egg components and egg phospholipid composition in laying hens. Poultry Sci. 89:696.

Masadeh, M.K. and **S.E. Scheideler**, 2010. High dietary inclusion of dried distillers grains with solubles in broiler rations - Production effects and yields. Poultry Sci. 89: 669.

Masadeh, M.K., C. A Fassbinder-Orth and **S.E. Scheideler**, 2010. High dietary inclusion of dried distillers grains with solubles in broiler chick rations in combination with Allzyme SSF enzyme - Effects on yield and endogenous enzyme levels. Poultry Sci. 89:T188.

Aljamal, A.A. and **S.E. Scheideler**, 2010. The effect of selenium source and supplementation level on vitelline membrane strength and glutathione peroxidase activity in liver and shell gland of laying hens. Poultry Sci. 89: W229 (Student Presentation Award winner).

Hahn, D., **S. Scheideler**, E.E. M. Pierson and C.L. Novak, 2010. The effects of the addition of phytase and an enzyme cocktail to high and low nutrient density diets with DDGS or MBM in laying hens during Phase II. Poultry Sci. 89:339.

Masadeh, M.A. and **S.E. Scheideler**, 2010. High dietary inclusion of dried distillers grains with solubles in laying hen rations in combination with Allzyme SSF enzyme (Phase II). Poultry Sci. Abstracts 2010 International Poultry Science Forum 89: P202.

**Scheideler, S.E.**, P.Weber, A. Yersin, R. Snyder and T. Pham, 2010. Efficiency of xanthophyll and lutein deposition in the egg yolk from dietary pigmentors. Poultry Sci. Abstracts International Poultry Sci. Forum, Atlanta, GA. 89:P192.

Hahn, D., **S. Scheideler**, E.E. M. Pierson and C.L. Novak, 2010. The effects of addition of phytase and an enzyme cocktail on high and low nutrient density diets in laying hens. Poultry Sci. Abstract, International Poultry Sci. Forum, Atlanta, GA. 89:P240.

### **Extension Media Publications and Presentations**

**Purdum, S.E.** and A. Bigge. 2023. Poultry Judging – Evaluation of Past Production Hens  
<http://campus.extension.org/course/view.php?id=2317>

**Purdum, S.E.** and A. Bigge. 2022. The Basics of Incubating Poultry Eggs  
<https://campus.extension.org/course/view.php?id=2187>

**Purdum, S.E.** and A. Bigge. 2022. Identifying the Sex of Newly Hatched Chicks  
<https://campus.extension.org/mod/scorm/view.php?id=93602>

**Purdum, S.E.** and A. Bigge. 2022. Chicken Embryonic Development

<https://campus.extension.org/mod/scorm/view.php?id=94762>

**Purdum, S.E.** 2023. UNL Poultry News, Winter, Spring, Summer, and Fall Issues. Distributed electronically and published on UNL Animal Science Website:

<https://animalscience.unl.edu/poultry>

**Purdum, S.E.** 2023. Chick Days – Organizer, presenter for Poultry Quiz Bowl and Photography and Art Contests

**Purdum, S.E.** 2022. UNL Poultry News, Winter, Spring, Summer, and Fall Issues. Distributed electronically and published on UNL Animal Science Website:

<https://animalscience.unl.edu/poultry>

**Purdum, S.E.** 2022. Chick Days – Organizers, presenter for Poultry Judging Clinic and Photography and Art Contests

**Purdum, S.E.** 2021. UNL Poultry News, March, Summer, Nov. Issues. Distributed electronically and published on UNL Animal Science Website:

<https://animalscience.unl.edu/poultry>

**Purdum, S.E.** 2020. Chick Days Photography and Egg Art Contests held at 2020 Nebraska State Fair

**Purdum, S.E.,** 2020. UNL Poultry News, February, April, June, September and November editions. Distributed electronically and published on UNL Animal Science website:

<https://animalscience.unl.edu/poultry>.

**Purdum, S.E.** Chicken Chat, May 9, 2020. Zoom Meeting 91189334885.

**Purdum, S.E.,** 2018. Coordinator for UNL Poultry Interest Team Webinar Series,

<https://animalscience.unl.edu/poultry-interest-team-webinar-series>.

Purdum, S.E., 2018. Animal Care Wednesday – Common Poultry Health Issues, UNL extension Webinar

### **Extension Publications – Neb Facts (Since 2010) (See on-line publications)**

**Purdum, S.E.** 2018. Nebraska Poultry Expansion. Neb Guide G2309, Nebraska Extension

**Purdum, S.E.** and P. Eusebio-Balcazar, 2016. 4 Ways to Improve laying hen bone strength. Egg Industry, May 2015. WattAgNet.com.

**Purdum, S.E.** 2016. Strategies to Improve Keel Bone Strength and Skeletal Integrity of Laying Hens in Various Housing Systems, S.E. Purdum, Midwest Poultry Federation Convention, St. Paul, MN., March 14, 2016, Proceedings.

**Purdum, S.E.**, 2015 GMO Poultry Feed does not alter chicken or eggs, Egg Industry, May 2015.

**Purdum, S.E.**, 2014. Proper Ventilation for Poultry, Radio Segment for Living the Country Life, Des Moines, IA, Nov. 19, 2014.

**Purdum, S.E.**, B. Kriefels and D. Weitzenkamp, 2014 Poultry Handling 4-H Livestock Quality Assurance Module, March 7, 2014; <http://campus.extension.org/mod/page/view.php?id=26684>.

**Purdum, S.E.**, 2014. DDGS in Poultry Rations, Webinar, October 7, 2014. U.S. Grains Feed Council, Korea.

**Purdum, S.E.**, 2014. Soybean Meal Research Update, WattagNet.com, Feed Management, May/June 2014, p. 20-23.

**Purdum, S.E.**, 2014. Nutrition and egg safety papers highlight IPSF 2014. April 2014 Egg Industry p. 8-11.

**Purdum, S.E.**, 2014. Market Journal Poultry Industry Update, Market Journal, April 18, 2014.

**Purdum, S.E.**, 2014. Egg Quality, food safety, Egg Industry, January 2014, P. 10-15. [www.WATTAgNet.com](http://www.WATTAgNet.com).

**Purdum, S.E.**, 2013. New poultry nutrition insights offered at the International Poultry Scientific Forum. Feed Management.

**Purdum, S.E.**, March 2013. Layer Research highlighted at International Scientific Forum, Egg Industry, Vol 188, # 3, pl.

**Purdum S. E.**, January 2013. Dangerous viral diseases highlight importance of biosecurity. Egg Industry, Vol. 188, # 1, p. 10-12.

**Purdum S.E.**, October 2013. Hen behavior, nutrition research highlighted at Poultry Science Association meeting, Egg Industry, Vol. 118, # 10.

**Purdum S.E.**, July 2013. Calcium source particle size has an impact on pullets. Vol. 118, #7, p. 13-15.

**Purdum, S.E.** and B. Kreifels, 2012. Feeding low oil DDGS to layers. Egg Industry, 117: Vol. 7. p. 4-6.

**Purdum, S.E.**, 2012. Hen-pecking behavior in alternative environments. Egg Industry, 117: Vol. 11, p. 6-7.

**Purdum, S.E.**, 2012. Getting more value from poultry feed ingredients. Feed Management, March/April, p. 16-19.

**Purdum, S.E.**, 2012. Starting Spring Chicks. The Nebline, University of Nebraska –Lincoln,

Lancaster County. Extension., p. 1.

**Purdum, S.E.**, 2012. Examining the impact of low oil DDGS in feed. Feed Management, July/August, p. 16-17.

**Purdum, S.E.**, 2011. Laying Hen behavior influenced by cage design. Egg Industry, October 2011. p. 12-13.

**Purdum, S.E.**, 2011 New study finds that higher than current levels of dried distillers grains may be effectively used in laying hen diets. Press Release, Poultry Science Association; 10/31/2011. [www.poultryscience.org/pr100311.asp](http://www.poultryscience.org/pr100311.asp).

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