Dr. Victoria Ayres

Tennessee Tech University Assistant Professor Agriculture (931) 372 x6134 vayres@tntech.edu

Professional Positions

Assistant Professor, Tennessee Tech University, College of Agriculture and Human Ecology. (January 2022 - Present).

Education

- PhD, Animal and Food Science, Poultry Nutrition and Feed Manufacture. West Virginia University, 2022.
- Graduate Research Assistant (Assistantship). West Virginia University, Morgantown, WV, United States. August 1, 2017 May 1, 2022.
- MS, Nutrition and Food Science, Poultry Nutrition and Feed Manufacture. West Virginia University, 2019.
- BS, Animal Science. The Ohio State University, 2017.

Professional Memberships

Poultry Science Association. (March 2017 - Present).

Awards and Honors

Advisor of the Year, Tennessee Tech University. (April 2024).

- Outstanding Agriculture Advisor Award, Tennessee Tech University School of Agriculture. (April 2024).
- Outstanding Agriculture Teacher Award, Tennessee Tech University School of Agriculture. (April 2024).
- College of Agriculture and Human Ecology Outstanding Agriculture Research Award, Tennessee Tech University School of Agriculture. (April 2023).
- School of Agriculture Outstanding Faculty Member Award, Tennessee Tech University School of Agriculture. (April 2023).

Media Appearances and Interviews

"Nurturing Poultry Passion: Reaching Milestones in Poultry Sciences- Dr. Victoria Ayres," Poultry Campus by Wisenetix. (October 9, 2023).

Publications

- Fuentes, A., Sherren, P., Sutzman, J., Peachey, N., Ayres, V. (in press). *The effects of biochar as a litter amendment on broiler growth performance* (vol. 416P).
- Fuentes, A., Sherren, P., Stutzman, J., Peachey, N., Ayres, V. (in press). The Effects of Biochar as a Litter Amendment in on Broiler Growth Performance and Litter Quality. Tennessee Tech University Research and Creative Inquiry Day.
- Tabler, T., Liang, Y., Ayres, V., Maharjan, P., Thornton, T., Wells, J., Moon, J. (2023). WATER USE, CLIMATE CHANGE AND LIVESTOCK (D 211 ed.). https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/D211.pdf
- Boltz, T., Ferrel, J., Bowen, K., Ayres, V., Moritz, J. (2023). The effect of a dacitic tuff breccia (Azomite®) in corn, soybean, and DDGS based diets that vary in inorganic phosphate source on pellet mill production rate and pellet quality (E-suppl. 1 ed., vol. 100). USA:. https://poultryscience.org/files/galleries/2021_PSA_Annual_Meeting_Abstract_Book.pdf
- Tabler, T., Thornton, T., Maharjan, P., Ayres, V., Wells, J., Moon, J. (2023). KEEPING POULTRY SAFE FROM BLACK FLIES (BUFFALO GNATS) (D 213 ed.). https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/D213.pdf
- Tabler, T., Ayres, V., Maharjan, P., Wells, J., Moon, J., Urrutia, J. (2023). ANTIBIOTIC ALTERNATIVES IN BROILER PRODUCTION: FEED ADDITIVES (D 209 ed.). https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/D209.pdf
- Tabler, T., S., Barnett, D., Liang, Y., Liang, V., Wells, V., Wells, J., Maharjan, P. (2023). KEEPING POULTRY SAFE WITH BIOSECURITY PRINCIPLES AND SITE-SPECIFIC PLANS (D 207 ed.). https://utia.tennessee.edu/publications/wpcontent/uploads/sites/269/2023/10/D207.pdf
- Tabler, T., Liang, Y., Ayres, V., Wells, J., Maharjan, P., Moon, J. (2023). ATTENTION NEEDED ON POULTRY DRINKING WATER (D 204 ed.). https://utia.tennessee.edu/publications/wpcontent/uploads/sites/269/2023/10/D204.pdf
- Tabler, T., Hawkins, S., Maharjan, P., Ayres, V., Moon, J., Urrutia, J. (2023). COMPOSTING DAILY POULTRY MORTALITY (D 206 ed.). https://utia.tennessee.edu/publications/wpcontent/uploads/sites/269/2023/10/D206.pdf
- Tabler, T., Liang, Y., Moon, J., Ayres, V., Maharjan, P., Wells, J. (2023). *POULTRY PRODUCTION GOING FORWARD: WHERE WILL THE WATER COME FROM?* (D 203 ed.). https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/D203.pdf
- Tabler, T., Maharjan, P., Ayres, V., Moon, J., Wells, J. (2023). *PRACTICE BACKYARD POULTRY BIOSECURITY* (D 202 ed.). https://utia.tennessee.edu/publications/wpcontent/uploads/sites/269/2023/10/D202.pdf
- Boltz, T., Ferrel, J., Castro, F., Bickmore, B., Bowen, K., Lynch, E., Ayres, V., Moritz, J. (2023). Improvement in Improvement in production rate, milling efficiency, and pellet quality of broiler diets containing corn, soybean, and corn-derived distillers dried grains with solubles using separated fractions and whole particle inclusion of a dacitic tuff breccia (AZOMITE®). *Journal* of Applied Poultry Research, 32(1).
- Tabler, T., Ayres, V., Maharjan, P., Liang, Y., Moon, J., Wells, J. (2023). GANGRENOUS DERMATITIS A THREAT TO BROILER CHICKENS (D 199 ed.). https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/D199.pdf

- Bowen, K., Lynch, E., Boltz, T., Ayres, V., Moritz, J. (2023). *Evaluation of the thermostability of a phytase and its effect on broiler performance, bone mineralization, and mineral digestibility.* http://southernpoultrysciencesociety.org/pdfs/2023-SPSS-Abstracts.pdf
- Ayres, V., Boltz, T., Grushecky, S., Wang, J., Moritz, J. (2023). *Heating system and feed additive effects on foot pad quality, broiler performance, and immune status.* http://southernpoultrysciencesociety.org/pdfs/2023-SPSS-Abstracts.pdf
- Lynch, E., Bowen, K., Boltz, T., Ayres, V., Moritz, J. (2023). The effects of hygienic pelleting in diets that differ in amino acid density on Ross 708 broiler performance, amino acid apparent ileal digestibility, and requirement. http://southernpoultrysciencesociety.org/pdfs/2023-SPSS-Abstracts.pdf
- King, E., Ayres, V., Hobbs, D. (2023). The effects of varying temperatures and times in a hot water bath on trypsin inhibitor activity. http://southernpoultrysciencesociety.org/pdfs/2023-SPSS-Abstracts.pdf
- Tabler, T., Hawkins, S., Liang, Y., Ayres, V., Maharjan, P., Moon, J., Wells, J. (2023). *PREVENTING FIRES IN POULTRY LITTER STACKING SHEDS* (D 195 ed.). https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/D195.pdf
- Tabler, T., Hawkins, S., Maharjan, P., Ayres, V., Wells, J., Moon, J. (2022). AVIAN INFLUENZA CONTINUES TO THREATEN TENNESSEE POULTRY FLOCKS (D 191 ed.). https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/D191.pdf
- Tabler, T., Khaitsa, M., Jeckoniah, J., Odoi, A., Ayres, V., Maharjan, P., Wells, J. (2022). VILLAGE CHICKENS AND WOMEN'S ACCESS TO AGRICULTURAL EXTENSION SERVICES ACROSS AFRICA (D174 ed.). https://utia.tennessee.edu/publications/wpcontent/uploads/sites/269/2023/10/D174.pdf
- Bowen, K., Jackson, M., Ayres, V., Boltz, T., Lynch, E., Moritz, J. (2022). Performance, carcass quality, tibia ash, and mineral digestibility responses of Ross 708 broilers to increasing dose of two commercially available mixer-added phytases. *Journal of Applied Poultry Research*, *31*(3).
- Bowen, K., Boltz, T., Ferrel, J., Ayres, V., Moritz, J. (2022). The effect of dacitic (rhyolitic) tuff breccia (Azomite®) in corn, soybean, and DDGS based diets that vary in inorganic phosphate source on pellet mill energy use, 0 to 21-day broiler performance, and apparent ileal amino acid digestibility. *Journal of Applied Poultry Research*, 31(3).
- Tom, T., Ayres, V., Lang, Y., Maharjan, P., Moon, J., Wells, J. (2022). MANAGE LITTER QUALITY FOR BETTER PAW QUALITY (D173 ed.). https://utia.tennessee.edu/publications/wp-content/uploads/sites/269/2023/10/D173.pdf
- Tom, T., Moyle, J., Ayres, V., Lang, Y., Maharjan, P., Hawkins, S. (2022). USING VEGETATIVE BUFFERS FOR AIR EMISSION MANAGEMENT ON TENNESSEE POULTRY FARMS (D172 ed.). Cookeville:. https://utia.tennessee.edu/publications/wpcontent/uploads/sites/269/2023/10/D172.pdf

Presentations

Ayres, V. (Presenter), "Warren County Backyard Poultry Workshop," McMinnville, TN, United States. (May 2023).

- Ayres, V. (Presenter), International Poultry Scientific Forum, "Heating system and feed additive effects on foot pad quality, broiler performance, and immune status," Atlanta, GA, United States. (January 2023).
- Ayres, V. (Presenter), Clay County Annual Poultry Grower Meeting, "Wood Heating Systems," Celina, TN, United States. (December 2022).
- Ayres, V. (Presenter), Pennsylvania Poultry Sales and Service Conference, "Heating System and Feed Additive Effects on Foot Pad Quality, Broiler Performance, and Immune Status," State College, PA, United States. (September 2022).
- Ayres, V. (Presenter), Virtual West Virginia Poultry Festival Educational Program, "Wood Heating Systems," Virtual. (July 2022).

Contracts, Fellowships, Grants and Sponsored Research

- Ayres, V. (Principal), "Industry Education Recruitment Funding," Sponsored by US Poultry and Egg Association, Federal, \$7,000.00. (October 2024 August 2025).
- Ayres, V. (Principal), "Evaluation of the effects of Zinmet (Zinc-Methionine) as a partial replacement of Inorganic Zinc Sources on broiler performance in Ross 708 Broilers," Sponsored by Global Animal Products, Private, \$39,833.84. (August 2024 - August 2025).
- Ayres, V. (Principal), "The effects of biochar as a litter amendment on broiler performance, foot pad scores, and litter quality," Sponsored by Metzler Forest Products, Private, \$14,831.90. (February 2024 - February 2025).
- Ayres, V. (Principal), "The effect of Aquatize® on broiler performance metrics," Sponsored by Koch Foods and Millpark Industries, Private, \$24,026.40. (May 12, 2023 June 30, 2024).
- Ayres, V. (Principal), "Mycotoxin Binder Efficacy Trial," Sponsored by Cobb-Vantress, Private, \$17,849.40. (March 10, 2023 April 30, 2024).
- Ayres, V. (Principal), "Industry Education Recruitment Funding," Sponsored by US Poultry and Egg Association, Federal, \$4,620.00. (November 2023 Present).
- Ayres, V. (Principal), Bowhay, C. M. (Co-Principal), "Faculty Academy for Course and Program Development: Incorporation of Ration Development Software into Animal and Poultry Science courses," Sponsored by Tennessee Tech University, Tennessee Tech University, \$5,000.00.
- Ayres, V. (Principal), "Industry Education Recruitment Funding," Sponsored by US Poultry and Egg Association, Federal, \$4,620.00. (November 2022 Present).

Research Activity

- "The evaluation of the effects of ZinMet as a partial replacement of inorganic zinc sources on broiler performance in Ross 708 broilers". (August 2024 Present).
- "The effects of biochar as a litter amendment on broiler performance, foot pad scores, and litter quality" (On-Going). (February 2024 Present).
- "TN Tech SOA students perceived critical thinking skills" (On-Going). (October 2021 Present). Dr's Nattrass, Bowhay, Ayres and Duncan are collecting longitudinal data to attemp to guage

if and how students' time and experiences at Tech postively impact their crtitical thinking skills using the EMI Critical Thinking Skills assessment

"The effect of Aquatize on broiler performance metrics" (Complete). (May 15, 2023 - June 19, 2023).

Dr. Ayres worked with Koch Foods and Millpark Industries to investigate the effect of Aquatize on male broilers from 0-35 days.

"Mycotoxin Binder Efficacy" (Complete). (March 10, 2023 - April 14, 2023).

Dr. Ayres worked with Cobb-Vantress to determine mycotoxin binder efficacy in male broiler chicks.

Teaching Experience

AGR 1020, Connections to Agriculture, 1 course. AGR 4920, Senior Problem, 1 course. ANS 1200, Introductory Animal Science, 1 course. ANS 1210, Intro Animal Science Lab, 1 course. ANS 4200, Poultry Production/Mgmt, 3 courses. ANS 4940, Animal Science Topics, 1 course. ANS 4950, Animal Science Topics, 1 course. EVSA 6010, Environmental Agriculture, 1 course.

Mentoring

Camille Simmons (Undergraduate). October 2023 - Present.

Heather Spicer (Undergraduate). October 2023 - Present.

Teaching Innovation and Curriculum Development

Curricular Development. Poultry Science Concentration. January 2023 - Present. The Poultry Science Concentration was launched in Fall 2023 as an option for students in the Animal Science Degree program. This concentration focuses on poultry science and will prepare students specifically for roles within the poultry science industry.

Faculty Development Activities Attended

- Conference Attendance, "Poultry Science Association's Annual Meeting," Poultry Science Association, Louisville, KY, United States. (July 2024 Present).
- Conference Attendance, "international Production and Processing Expo," Atlanta, GA, United States. (January 2024 Present).
- Conference Attendance, "Poultry Science Association's Annual Meeting," Poultry Science Association, Philadelphia, PA, United States. (July 10, 2023 July 13, 2023).
- Conference Attendance, "International Production and Processing Expo," Numerous companies within animal and poultry science industries, Atlanta, GA, United States. (January 24, 2023 January 26, 2023).
- Conference Attendance, "International Poultry Scientific Forum," Southern Poultry Science Society, the Southern Conference on Avian Diseases, and U.S. Poultry & Egg Association, Atlanta, GA, United States. (January 23, 2023 - January 24, 2023).

University Service

Student Affairs Committee. (August 2024 - Present).

Admissions and Credits Committee. (August 2023 - Present).

Commission on the Status of Women. (July 2023 - Present).

Social Planning Committee. (May 2022 - Present).

Master of Science Committee. (February 2022 - Present).

Technology Planning Committee. (February 2022 - Present).

Institutional Animal Care and Use Committee. (January 2022 - Present).

Professional Service

Reviewer/Referee, Journal of Applied Poultry Research. (October 2022 - Present).

Student Presentation Judge, Poultry Science Association Annual Meeting, Louisville, KY. (July 2024).

Attendee, Meeting, Poultry Science Association Annual Meeting, Philadelphia, PA. (July 2023).

Conference Moderator, Poultry Science Association Annual Meeting, Philadelphia, PA. (July 2023).

Reviewer/Referee, Poultry Science Association, Philadelphia, PA. (July 2023).

Attendee, Meeting, International Poultry Scientific Forum, Atlanta, GA. (January 2023).

Attendee, Meeting, International Production and Processing Expo, Atlanta, GA. (January 2023).

Conference Moderator, International Poultry Scientific Forum, Atlanta, GA. (January 2023).

Public Service

Organizer, Tennessee Tech University, Cookeville, TN. (November 2023).

Judge, FFA, Lebanon, TN. (August 2023).

Organizer, Burks Sixth Grade Camp Experience, Cookeville, TN. (August 2023).

Judge, Tennessee Poultry Association. (May 2023).

Organizer, Tennessee Tech University and FFA, Cookeville, TN. (April 2023).

Volunteer, Tennessee Tech University and Farm Bureau, Cookeville, TN. (April 2023).

Volunteer, Tennessee Tech University and Farm Bureau, Cookeville, TN. (April 2023).

Guest Speaker, Tennessee Tech University, Cookeville, TN. (February 2023 - March 2023).

Guest Speaker, Tennessee Tech University, Cookeville, TN. (February 2023).

Organizer, Tennessee Tech University. (November 2022).

Organizer, Burks Sixth Grade Camp Experience, Cookeville, TN. (August 2022).

Volunteer, Tennessee Tech University, Cookeville, TN. (June 2022).

Judge, Tennessee Poultry Association. (May 2022).

Organizer, Tennessee Tech University and FFA, Cookeville, TN. (April 2022).

Guest Speaker, Tennessee Tech University, Cookeville, TN. (February 2022 - March 2022).

Guest Speaker, Tennessee Tech University, Cookeville, TN. (February 2022).