WORLD ASSOCIATION for ANIMAL PRODUCTION

Number 39 2025

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The World Animal Science News

Main Topics

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EDITORIAL

As mentioned in my last editorial the 2024 International Summit on the Societal Role of Meat and Livestock was held on October 30-31, 2024, at the CSU Spur Campus in Denver, Colorado. Serving as a scientific follow-up to the 2022 meeting in Dublin, Ireland, which produced the "Dublin Declaration of Scientists" endorsed by over 1,200 experts worldwide, the Denver summit aimed to promote open and transparent discussions on the societal role of livestock and meat production.

Bringing together policymakers, scientists, industry leaders, and media representatives, the summit addressed critical intersections between meat production, global nutrition, environmental sustainability, and social values. The agenda included keynote speeches by leading scientists, panel discussions on scientific and ethical aspects of livestock production, and interactive sessions on topics such as food security, technological advancements, ecological impacts, and communication strategies.The event concluded with the "Denver Call for Action," emphasising collaborative efforts to advance science-based insights into livestock production and animal product contributions to human nutrition, economic stability, and ecological health. The “Denver Call for Action” can be accessed in several languages here and concluded with calling on “policymakers worldwide to commit themselves to plurality and rigor in evidence-based decision-making. Meeting the massive challenge of nourishing global populations while minimizing environmental harm, will only be achieved through the transparent application of the scientific method, steering clear of hubris, presumptuousness, and dogma”.

Key initiatives outlined at the summit included:

1. **Enhanced Outreach and Communication**: Promoting transparency among scientists and producers to combat misinformation and foster informed public decisions.
2. **Collaborative Research and Development**: Leveraging nutritional strategies, genetic advancements, AI, and ecological strategies to reduce greenhouse gas emissions, improve animal welfare, and sustain nutrient-dense food systems.
3. **Policy Recommendations and Partnerships**: Encouraging global dialogue to align dietary recommendations with scientific findings while respecting cultural diversity and food sovereignty.

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Editorial (continues)

The Denver Summit highlighted the importance of evidence-based policymaking, urging leaders to rely on validated data to build public trust and support sustainable agricultural practices. It also called for a balanced approach to nutrition and environmental sustainability, critiquing overly restrictive dietary models for failing to address the complexity of societal, nutritional and ecological challenges. Advocating for the inclusion of nutrient-rich animal foods, the summit reinforced their vital role in ensuring global food security.

Overall, the 2024 Denver summit marked a pivotal step toward advancing sustainable livestock systems, fostering pragmatic policymaking, and emphasizing the essential contributions of livestock to global society. As with the previous meeting in Ireland in 2022, the thought-provoking papers will be published in an issue of Animal Frontiers to come out early this year. In the meantime, the pdf and video versions of the presentations are available on line. I encourage you all to engage with this initiative.

Frank Dunshea
President WAAP

From WAAP Members

American Dairy Science Association® (ADSA®)

ADSA News

Starting today, get the insider track on the latest advancements in dairy production and dairy food science. Join ADSA's free weekly newsletter, tune into our *Dairy Digressions podcast*, or become a member to access benefits and thoughtfully curated, science-based resources to keep you at the forefront of innovation.

Not ready to become a member? We offer half-off e-memberships for those outside of the United States and Canada.

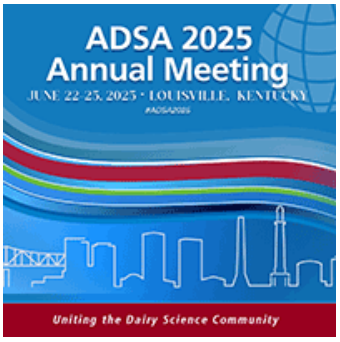
Earn journal discounts | ADSA journal loyalty program

Are you planning to publish in--or review for--the *Journal of Dairy Science* or *JDS Communications*? The ADSA Loyalty Rewards Program sets you up to earn and redeem points for contributions to either journal. As you accumulate points, you'll unlock significant article publishing charge rewards. Learn more



Submit your science | 2025 ADSA Annual Meeting in Kentucky

ADSA's Annual Meeting, which gathers dairy science experts from around the globe, is taking place June 22 to 25, 2025, in Louisville, Kentucky. You can join our prestigious scientific program by submitting your abstract **by February 12, 2025, at 11:59 p.m. CST**. Learn more

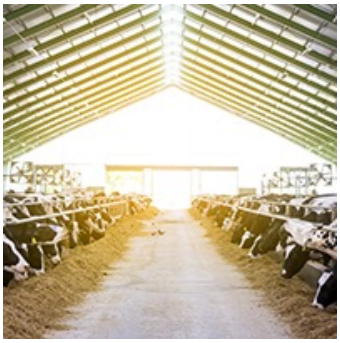


Dairy cow and farm resilience | Join the 47th Discover Conference, Mitigating Stress Impacts to Welfare, Health, and Productivity

Join us in person from **May 5 through 8, 2025**, for an

in-depth meeting dedicated to innovative strategies to mitigate stress factors including the challenges of increasing incidence of diseases and metabolic disorders, as well as abiotic stressors caused by climate change, all of which significantly impact dairy cows and the industry as a whole. The conference will cover animal welfare, production efficiency, and economic viability, and showcase cutting-edge technologies.

Register before April 4 for early bird pricing, and book your room in the ADSA hotel block **now to save!** Join us



Special issue | Feed Additives for Methane Mitigation

We're thrilled to announce that the *Journal of Dairy Science* has just released a special issue synthesizing decades of nutrition innovation on feed additives for methane reduction. The six articles outline detailed technical recommendations—covering the full spectrum of additive development and implementation—and represent actionable best practices from a global team of experts to help fill knowledge gaps and build trust around feed additives. Learn more



American Society of Animal Science (ASAS)

ASAS News

AMERICAN SOCIETY OF ANIMAL SCIENCE

ASAS-CSAS ANNUAL MEETING
HOLLYWOOD, FL • JULY 6-10, 2025

The 2025 Annual Meeting will take place at the Diplomat Beach Resort in Hollywood, Florida. When not in sessions, you are just steps away from soaking up the breezy South Florida lifestyle at the lagoon pool with ocean views of the alabaster beach. Make sure to bookmark the meeting website to stay updated.

AMERICAN SOCIETY OF ANIMAL SCIENCE MIDWEST

The 2025 Midwest Section Meeting will be held in Omaha, NE, March 9-12, 2025. Make sure to visit the Midwest Section Meeting website or scan the QR code below for more meeting information.

AMERICAN SOCIETY OF ANIMAL SCIENCE SOUTHERN | AMERICAN SOCIETY OF ANIMAL SCIENCE WESTERN

The ASAS Southern Section and ASAS Western Section will meet jointly in 2025 in Arlington, Texas, April 6-8, 2025. More information can be found on the meeting website.



CHALLENGES AND SOLUTIONS FOR OPTIMIZING LONG-TERM HEALTH

Join us at the top of picturesque Snowmass Village, Colorado at the Viewline Resort Snowmass for the 2025 Perinatal Biology Symposium, August 16-19, 2025. This Symposium will bring together clinicians, scientists and established senior and junior investigators from clinical medicine, basic research and applied livestock production, from around the world to report and discuss their findings in an atmosphere conducive to frank yet amicable exchange. Scientific exchange will occur across all levels via plenary sessions, poster sessions, trainee workshops and informal discussions, with time also dedicated to presentations by and recognition of trainees and early career investigators. More information can be found on the meeting website.

As a member of ASAS, we are sure you are aware of all the benefits that having a professional membership offer, including complimentary registration to monthly webinars and early access to the recordings, access to ASAS Journals, and discounted meeting registration to name a few. Remember to renew your ASAS membership or join ASAS to take advantage of these benefits.
More information on memberships can be found on the Membership website.

European Federation of Animal Science (EAAP)

EAAP News

EAAP
European Federation of Animal Science

Final Call for Abstracts: International Conference on Companion Animals (14–16 May 2025, Milan)

We would like to remind all interested researchers that the deadline for submitting abstracts to the International Conference on Companion Animals, organised by EAAP, is finally set for 31 January. The event will be held in Milan (Italy) from 14 to 16 May 2025. We invite researchers to seize this opportunity to engage with the world's leading experts in the field of Companion Animals and share their work. Active participation by submitting your abstract and present your research will promote scientific debate, encourage new collaborations, and boost the development of the entire sector. Do not miss the chance to showcase your research and expand your professional network. We look forward to welcoming several hundreds of scientists to this important international event organized by EAAP.



76th European Animal Science Conference: Call for Abstracts Now Open

The call for abstracts for the 76th European Animal Science Conference, organised by EAAP, is now open! The event will be held on August 25-29 2025 in the picturesque alpine city of Innsbruck (Austria) and offers a unique opportunity to present your research, engage with leading experts, and forge new international collaborations. Moreover, by

participating, you will have the chance to become known within the world's most authoritative animal science network. The EAAP Scientific Committee has proposed as many as 98 topics: discover the one that best suits your work and contribute to the advancement of animal science by sharing findings and perspectives with colleagues from around the globe. Don't miss out! We look forward to welcoming you in great numbers.

Join the 26th EAAP Webinar titled "Animal Welfare: Bridging Policy and Practice"
February 11, 2025 | 15:00 – 17:00 CET



Organized in collaboration with the European University Institute, this webinar will explore the intersection of policy and practice in animal welfare. Moderated by Fabio Gaetano Santeramo, the session features distinguished speakers including Andrea Gavinelli (DG SANTE) and Laura Boyle (Teagasc). Don't miss this opportunity to gain insights from leading experts and participate in interactive discussions. For further details and registration, please consult the webinar dedicated page here!

Latin American Association of Animal Production (ALPA)

ALPA News

New ALPA Board of Directors

Last October, the ALPA General Assembly was held to appoint a new board of directors. The committee is composed of:

President: Fabio Montossi (Uruguay)
Vice President 1: Paulo C. F. Carvalho (Brazil)
Vice President 1: Ana Carolina Espasandin (Uruguay)
Member 1: Abelardo Conde-Pulgarín (Colombia)
Member 2: Leyla Ríos de Álvarez (Venezuela)
Member 3: Tercia Cesarea Reis de Souza (Brazil)
Member 4: Miguel Cervantes Ramírez (Mexico)
Executive Secretary: Beatriz E. Mernies (Uruguay)

For more info visit the webpage.

The XXVIII ALPA Congress will be held in Punta del Este (Uruguay) from September 22 to 24, 2025. Participation will be possible as invited conferences, original works and abstracts. The papers will be published in *Archivos Latinoamericanos de Producción Animal* (ISSN-L 1022-1301).

A new book: *Control of losses due to feline predation with the use of Sanmartinero cattle and electric fences in the Colombian plains* (in Spanish), whose authors are Rafael Hoogesteijn, Carlos Valderrama-Vasquez, Esteban Payán, Howard Quigley, and Almira Hoogesteijn has been published by ALPA. It can be downloaded from here.

South African Society for Animal Science (SASAS)

SASAS News

Following the summer holidays and festive season, businesses are coming back online. The universities are not fully functioning until mid-February and March. These summer holiday breaks are highlights in our annual calendar. Summer in southern Africa (December, January, February) is a lovely time for relaxing in the warmth of this Southern sub-tropical region. In agriculture, however, the summer is a very busy time.

Southern Africa's climate and weather patterns are determined by the warm Indian Ocean along the Eastern regions with summer rains, and the cool South Atlantic Ocean along the west coast with dry summers and wet winters. Farming is aligned to these climatic zones. In the summer rainfall eastern region, extensive animal production, mainly beef, and cropping, mainly maize, thrive. In the drier western regions, livestock farming centres around wool sheep and the non-wool, or hair sheep for meat production. The goats are either breed for meat production that includes Boer and Savannah goats, Angora goats for mohair production, and a few milk-producing herds. In the furthest south western regions, the climate and soils favour mixed farming with small grain cropping stubble grazing by wool sheep and beef cattle. The region also favours cultivating and producing excellent renowned wines. Dairy production is practised in both climatic zones as zero-grazing or in a combination with pastures.

This diversity of climates and production systems raise many scientific questions and offer interesting and fulfilling research opportunities. These questions range from the never-ending questions of gene-environment interactions and production, fertility, growth and management. Gene-environment interactions are particularly interesting since southern Africa has a range of indigenous livestock attuned to the climates, parasites and endemic diseases. Non-indigenous livestock were introduced with the purpose of improving the yield and quality of produce. It has become abundantly clear however, that science has successfully integrated the characteristics of indigenous and exotic livestock to produce well-adapted and productive breeds and production practices.

The emerging challenges are sustainable production to meet the people's increasing needs while the probability of increasing resources for production is limited. In addition, livestock is bearing a burden of blame for greenhouse gas emissions. These emerging challenges offer research opportunities either state or private sector funded. On the universal scale, we are shifting from the 4th to the 5th Industrial Revolution. It is foreseen that technology will increase in leaps and bounds that will be highly applicable in animal agriculture, and that will spill over to economies and societal upliftment.

The SA Society for Animal Science remains committed to identifying research questions, pursuing research, distributing knowledge and contributing to demographic equity.

SASAS tackles these matters through its Annual National Congress (8 to 10 July 2025) and sectoral symposia

and workshops. SASAS publishes the SA Journal of Animal Science, the Journal of Applied Animal Husbandry and Rural Development, press releases and blogs. Practicing natural scientists are required to register with the SA Council for Natural Scientific Professions, and SASAS complies with continued professional development (CPD) in terms of the legislation.
Regarding the WAAP, SASAS, previously the SA Society of Animal Production, is a founding member and takes pride in supporting the WAAP.

News from Science

The trophic distribution of biomass in ecosystems with co-occurring wildlife and livestock

Energy flows from primary producers to top-level consumers, creating distinctive biomass patterns across trophic levels. However, anthropogenic actions-including climate change, land-use modification, and selective predator removal-significantly alter these networks, affecting bottom-up productivity and top-down regulation. This study explores Norway's rangelands (utmark) to examine how large herbivore and carnivore biomasses differ from theoretical expectations based on primary productivity. Historical data reveal transitions from livestock-dominated ecosystems to higher wild herbivore numbers, while carnivores remain below expected levels, even with partial recent recoveries. These discrepancies highlight how management policies interact with natural trophic dynamics. In many Norwegian ecosystems, herbivore biomass surpasses anticipated levels, whereas carnivore biomass remains low in relation to available prey. The findings stress the need for integrated management involving forestry, agricultural, and wildlife sectors to reconcile human demands with ecological processes, ensuring sustainable trophic interactions. Overall, livestock husbandry and wildlife management play pivotal roles in shaping current biomass distributions. Read the full article on Nature.



Nutrient use and methane emissions in growing beef fed different protein sources and a pasture-based diet

The article compared four diets for growing beef cattle: total mixed rations (TMR) with soybean meal (SB), local brewers' spent grains (BSG), local field beans (BNS), and a fresh-cut ryegrass diet (GRA). Researchers assessed intake, nutrient and energy utilisation, growth, and enteric methane (CH_4) emissions. Holstein × Angus steers underwent measurements in both respiration chambers and group-housed conditions. Results showed that GRA-fed animals had lower CH_4 yield per kilogram of dry matter and organic matter intake. However, these steers exhibited greater nitrogen (N) losses through urine and total manure, and poorer N utilisation. Faecal and urinary energy outputs were also higher for GRA-fed cattle. When considered per kilogram of digestible intake, all diets showed similar CH_4 yields, indicating that reduced digestibility of the GRA diet likely explains its lower CH_4 output. Nonetheless, the higher energy and N losses, alongside slower growth rates on GRA, highlight less efficient utilisation, raising environmental concerns. Read the full article on Journal of Animal Science.

Sex identification in rainbow trout using genomic information and machine learning

Accurate sex identification is crucial in aquaculture for effective fish stock management and breeding, yet visual identification in juvenile or premature fish is typically challenging. With the growing use of genomic selection in aquaculture, there is an increasing volume of genomic data available for many farmed fish species, including rainbow trout. However, pinpointing suitable genetic markers for sex determination is often complicated by the lack of conserved genomic regions and the diversity of sex determination systems in ray-finned fishes. In this study, researchers applied the Extreme Gradient Boosting algorithm, a supervised machine learning technique, to unimputed genomic data for sex prediction, without requiring prior knowledge of which markers were suitable. Evaluation on four simulated datasets - varying in genotyping error rates from 5% to 50% - demonstrated accuracies ranging from perfect prediction (1.0) to 0.60, respectively. Testing on a real dataset from the Finnish Rainbow Trout Breeding Program yielded 98% accuracy, indicating this method's potential for routine application. Read the full article on Genetics Selection Evolution.



Effect of drinking water salinity on lactating cows' water and feed intake, milk yield, and rumen physiology

Desalination is increasingly used in arid and semi-arid regions, resulting in reduced salinity and mineral content in cows' drinking water. Although up to 1,000 ppm total dissolved solids (TDS) is considered safe, very low salinity levels might affect lactating cows' rumen physiology, feed and water intake, or milk yield. An experiment was conducted using four Israeli Holstein cows offered water with four electrical conductivity (EC) levels (400 to 1,000 µS/cm) via added NaCl. Over four 18-day periods, researchers measured feed and water consumption, milk yield and composition, rumen pH and temperature, and mineral concentrations in fluids and faeces. Results indicated that dry matter intake and energy-corrected milk yield were positively correlated with water salinity, particularly between 400 and 600 µS/cm. However, higher salinity reduced digestibility of ash-free amylase-treated NDF. Water EC had no significant influence on rumen volatile fatty acids, ammonia concentrations, or total water consumption. Further research is warranted. Read the full article on Animal.

News from International Organizations

UK considers lifting ban on pig and poultry PAPs in animal feed

Tentative steps are being taken to lift the ban on poultry and pig processed animal proteins (PAPs) in the UK, according to EFPRA, which represents the European animal by-product industry. EFPRA president Robert Figgener said the final months of last year showed a welcome development in lifting the feed ban on pigs and poultry PAPs, which was introduced following the BSE epidemic in the 1980s. The epidemic led to the slaughter of 4 million cattle and the death of 178 people from the human variant, Creutzfeldt-Jakob disease. Read the full article on PoultryWorld.



EU Outlook: Pig meat production to drop 1.2m tonnes in next 10 years

The EU pig meat production will decrease by 0.5% annually over the next years. This will result in a total decline of around 1.2 million tons by 2035 compared to the 2022-2024 average. The European Commission shared that projection in its Agricultural Outlook 2024-2035. According to the Commission, the reduction is primarily due to further societal concerns over intensive pig farming, the implementation of stricter environmental regulations in certain EU countries and reduced export opportunities. The EU added that African Swine Fever (ASF) is assumed to remain present in the EU, but no major outbreaks are expected. Continued vigilance will be necessary to prevent significant disruptions in production and trade, the EC wrote. Read the full article on PigProgress.



Job Offers

PhD student position at FBN, Dummerstorf, Germany

A PhD student position is available at the Research Institute for Farm Animal Biology (FBN). A master's degree or equivalent qualification in animal science, veterinary medicine, biology or related biosciences is required. The doctorate will be within the project "Development and validation of technical solutions to use of Black Soldier Fly Larvae (BSFL) as feed-related environmental enrichment for broilers to improve welfare and health". For more details and application read the attached document.

Technician at the University of Reading, United Kingdom

The University of Reading is looking for a Technician in Ruminant Nutrition and Methane Mitigation. The role involves supporting the evaluation of methane measurement technologies and examining and monitoring methane mitigation solutions on commercial and research dairy farms. Key responsibilities include managing animal trials, collecting and analysing samples, overseeing research timelines, and collaborating with researchers and stakeholders. The role also involves maintaining records, ensuring regulatory compliance, disseminating research findings, and participating in knowledge exchange activities. Application deadline: 12 February 2025. To find out more about the job and the application process, read the job vacancy.

Three full professors at Swedish University of Agricultural Sciences, Uppsala, Sweden

The Department Animal Breeding and Genetics of the Swedish University of Agricultural Sciences is currently looking for 3 new full professors within the areas of:

1. Animal Genetics with special emphasis on Breeding. The subject covers genetics relevant to the breeding of farmed animals (cattle, sheep, pigs, goats, or poultry) and sport and companion animals (horses, dogs or cats). The subject also includes the development of methods and models for genetic evaluation and selection, the design of breeding objectives and breeding programmes, as well as the evaluation of genetic change. Methods for automatic recording of traits, the use of genetic tests, reproduction techniques and crossbreeding, as well as the conservation of genetic variation, are also included in the subject.
2. Molecular Animal Genetics. The subject of the position is molecular animal genetics. It focuses

on the genetic background of complex and simply inherited traits (including clinical genomics) in both farmed animals and sport and companion animals.
3. Bioinformatics. The subject of the employment is bioinformatics. It comprises developing methods for analysing biological data, such as DNA, RNA, proteins, and metabolites, focusing on farmed animals, sport and companion animals, and microorganisms from their internal or external environment.

Deadline for all three: **28 April 2025**.

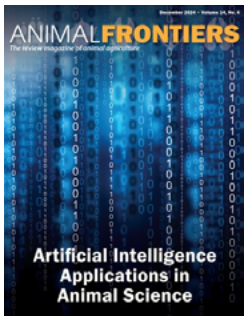
Publications

1. Animal Consortium (EAAP, INRAE, BSAS) – Elsevier

Animal: Volume 19 - Issue 1 – January 2025
Article of the month: "Review: Feed efficiency and metabolic flexibility"

2. Oxford Academic

Animal Frontiers, Volume 14, Issue 6, December 2024



3. New technical articles have been recently published on Engormix:

I. "What Are Feed Additives and How Do They Benefit Livestock?"

II. "Enhancing Calcium Metabolism and Egg Quality in Poultry"

III. "What do we still not know about cow cooling?"
IV. "Boosting sustainable dairy farming through improved feed efficiency and probiotics"

Other news

APSA 2025

APSA (the Australasian Pig Science Association) was established in 1987 to bring together people from a range of disciplines with a primary interest in pig science. The 20th APSA conference will be held in Melbourne at the RAVC City Club from 17th to 19th November 2025. The Conference is held biennially. The purpose of the Australasian Pig Science Association is to provide a forum for excellence in science related to all aspects of the pig industry. For more information visit the website.



E-nose and AI combined to detect mycotoxins in pet food

To detect mycotoxins in pet foods, researchers experimented with a combination of electronic nose technology and machine learning algorithms. Poisons produced by certain fungi, or mycotoxins, have serious ramifications for the pet food industry. For example, mycotoxin-contaminated cat food ingredients may have caused the 2021 wave of feline pancytopenia that killed more than 350 cats in the United Kingdom. Dangerous mycotoxins, such as aflatoxins, zearalenone, deoxynivalenol and fumonisin B1, have been found in pet food and ingredients around the world. These mycotoxins can cause both acute poisoning and chronic health issues, including immune suppression, liver damage, kidney toxicity and cancer. Read the full article here.



Unlocking Broiler Potential: How postbiotics and essential oils can help drive performance across growth stages

Feed ingredients and additives play a critical role in supporting poultry production, animal health, and performance. Common types include phytogenics, probiotics, prebiotics, and postbiotics—each with distinct modes of action. While individual substances can be effective, combining complementary types can provide more consistent results across varying production conditions. However, when used alone, the benefits could vary across different conditions. The more we know about the mode/s of action of these, the more we realize that just using one type might not give us consistent benefits. Understanding the mechanism of action of various feed ingredients and additives and combining the ones with synergistic benefits can give better value and consistency across different production systems. Read the full article here.



Meetings and Conferences

WAAP invites you to check the validity of the dates for every single event published below and in the Calendar of the website, due to the state of sanitary emergency that World is currently dealing with.

Event	Date	Location	Information
Midwestern Section Meeting	10 – 12 March 2025	Omaha, Nebraska, USA	website
50th Annual Conference of the Nigerian Society for Animal Production	16 – 20 March 2025	Lafia, Nigeria	website
Southern and Western Sections Joint Meeting	5 – 8 April 2025	Arlington, Texas, USA	website
BSAS Conference 2025	8 – 10 April 2025	Galway, Ireland	website
3rd EAAP Regional Meeting	9 -11 April 2025	Krakow, Poland	website
47th DISCOVER Conference	5 – 8 May 2025	Itasca, IL, USA	website
1st EAAP Companion Animals Workshop	14 – 16 May 2025	Milan, Italy	website
XXI AIDA Conference on Animal Production 2025	3 – 4 June 2025	Zaragoza, Spain	website
1st EAAP Artificial Intelligence 4 Animal Science Workshop	4 – 6 June 2025	Zurich, Switzerland	website
2025 ADSA Annual Meeting	22 – 25 June 2025	Louisville, Kentucky, USA	website
2025 ASAS-CSAS Annual Meeting	6 – 10 July 2025	Florida, USA	website
55th SASAS Annual Congress	8 -10 July 2025	Polokwane, South Africa	website
2025 Perinatal Biology Symposium	16 – 19 August 2025	Colorado, USA	website
76th EAAP Annual Meeting	25 – 29 August, 2025	Innsbruck, Austria	website
XXVIII ALPA Congress	22 – 24 September 2025	Punta del Este, Uruguay	website

More conferences and workshops are available on EAAP website.

The **World Animal Science News** is the Official WAAP Newsletter. This interesting update about activities of the global animal science community presents information on leading research institutions in the entire world and also informs on developments in the industry sector related to animal science and production. The Newsletter is sent to all WAAP member organizations and to their associates. You are all invited to submit information for the newsletter. Please send information, news, text, photos and logo to waap@waap.it .

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