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Main Topics

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Public policy and Brazilian agriculture

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An understanding of the fundamental role that public policy has played and continues to play in Brazilian agriculture requires a historical context. Here we will examine this context from initial European colonization to the present.

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MESSAGGE FROM THE PRESIDENT, JIM SARTIN :

As the new President of the World Association of Animal Production (WAAP), my primary goal is to enhance the visibility and stature of WAAP. I think it is important to insure that the organization has programs that keep the WAAP in front of its constituent members during the 5 years between the World Congress of Animal Production meetings. This can be accomplished in part by leveraging cooperation between our respective sister societies. For example, a quarterly newsletter can be easily constructed by combining animal science society news and society happenings for each region of the world and using targeted essays from the officers and Board members of WAAP. The name of the WAAP could be changed to reflect the naming of most of our individual societies, that is changing the name from animal production to animal science (though maintaining WAAP as the abbreviated name so as not to lose identity and name recognition). The website for WAAP can be updated with more feature rich content, such as a comprehensive listing of international agricultural meetings, minutes of Board meetings and links to our individual societies web sites (and vice versa), all designed to drive animal scientists to the WAAP website. In the past, WAAP published a Year Book on global animal science research that was well received and can again be published. The proceedings of the next WCAP could be programmed as special global issues for publication in Animal Frontiers and / or selected papers published in member society journals. With new services and updates in place, we can make a concerted effort to recruit new organizations and countries to our membership. Of course, the long-term goal for any WAAP President is to provide an engaging meeting 5 years following the last meeting. In that regard, the next WCAP meeting will be a CSAS/ ASAS jointly sponsored meeting in Vancouver in early July, 2018.

I look forward to working with the Secretary General and theCouncil of WAAP to develop a comprehensive proposal of how we can add value to WAAP for our constituent societies. I invite any suggestions from our members of how to better serve the needs of our combined organizations and to better serve global animal science.

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PUBLIC POLICY AND BRAZILIAN AGRICULTURE

1534 – 1970

Until European arrival in 1500, Brazilian agriculture is one based on extractivism. For 10,000 years or so, Amerindians practice primitive slash and burn agriculture on communal land to supplement hunting and gathering activities. Early European colonization introduces land ownership, often by aristocrats with huge land grants from the Portuguese Crown. In the far South, a beef cattle industry is created by gauchos in the natural grasslands. After experimenting with various crops, they find that the easily accessible coastal areas of the Northeast are best suited to sugarcane production. Sugar is Brazil's main export in the 17th and 18th centuries, and is only made possible by the use of slave labor. Brazil is the main destination for slaves imported from Africa, accounting for 40% of the total number of slaves brought to the Americas before slavery is abolished in 1888. Perhaps not coincidentally, the abolition of slavery coincides with the rise of the coffee industry in mountainous regions farther inland. The mid- to late 1800s sees a great influx of other European national groups, such as Italians who initially work the coffee plantations and Germans in the South. The immigrants work initially as indentured servants but also bring their own agricultural traditions. European agricultural technologies are best suited to the more temperate zones in the South, and thus is born the Brazilian wine industry in the hillier regions of the South. Therefore, during colonial times the main public policies affecting agriculture are those related to land ownership, slavery and immigration.

Jumping ahead to the mid-20th century, we find that Brazilian agriculture continues to depend primarily on sugar and coffee, concentrated in the Southeastern part of the country. In the North, rubber and cocoa extraction are important as well. Cattle and sheep ranching in the South are well established but have only regional impact. The vast lands of the Midwest are used for extensive cattle raising but the North is largely unoccupied. In the 1960s, Brazil is food insecure, needing to import much of its fruits, vegetables, and even staple foods like rice, beans, milk and meat. To further complicate matters, there has been little or no industrial development and the national balance of payments is negative, so that the country must borrow money to buy food. Food shortages are common, and some regions such as the dry and poor Northeast are subjected to frequent famines. To try to change the situation, the military government approves a new law governing agrarian reform (Estatuto da Terra), and creates new institutions to promote agricultural development. These include the Brazilian Institute of Agrarian Reform (IBRA), the National Institute for Agrarian Development (INDA), and also reorganizes the research institutions in the Ministry of Agriculture, creating a National Agriculture Research Department (DNPEA) from a plethora of institutes and specialized services and regional departments. To help implement those changes, the Government gets support from international institutions and friendly governments such as Germany and the USA, with a lot of technical assistance and training via GTZ and USAID.

1970 - 1985

Faced with chronic food shortages, economic stagnation and social and political unrest, the Brazilian government embarks upon a deliberate strategy to develop the country's agriculture, first by a total reorganization of the agricultural public sector. In 1970, the National Institute for Colonization and Land Reform (INCRA) is created by consolidating INRA and IBRA, with the mission of maintaining a register of land titles, administering public lands and land reform. By the mid-1970´s the first wave of modernization is already bearing fruits. Those changes are under way but not yet consolidated when the oil shock created by OPEC in 1973 increases food prices worldwide, making a terrible situation even worse. It is at this point that the military government of the time made some

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strategic decisions that changed the course of the country, especially its agriculture, forever.

This strategy has several aims: to secure Brazil's territorial sovereignty, to achieve food self sufficiency, and to expand its economic base. Accordingly, the strategy has several components. Territorial sovereignty requires occupation of the Midwest and North, where there is still armed conflict with guerrillas opposed to the military regime. The government enacts measures to grant credit on favorable terms and land deeds to farmers and ranchers who must clear the land and put it into production. Large regional development Programs financed by the World Bank and the InterAmericanDevelopment Bank facilitate the occupation of the new areas by the building of new roads and other infrastructure. These measures are concurrent with actions to promote industrial development, such as development of hydroelectric power and construction of heavy manufacturing plants. A national aerospace industry is born with the creation of EMBRAER, which to this day exports aircraft around the world. Faced with spiraling costs for imported oil, the government also supports the national petroleum company PETROBRÁS and invests billions into development of sugarcane ethanol as an alternative fuel. It will take many years for these investments to pay off, but eventually Brazil will become energy self-sufficient through a combination of hydroelectric power, domestic oil production and renewable biofuels.

Farmers and ranchers from the South and Southwest, lured by the availability of cheap (or free) land, migrate to the Midwest and North in great numbers. They are pioneers and entrepreneurs, and bring with them a wealth of knowledge and expertise about agricultural production. Unfortunately, technologies that worked well in the temperate South do not translate well into the tropical climate and acids soils they find in the Cerrado and Amazon regions. The Brazilian government convenes a small group of agricultural scientists to find solutions, and are convinced that 1) simply importing agricultural technologies from temperate countries will continue to fail, and 2) a long term sustained effort in agricultural research and development (ARD) for the tropics is needed. In 1974 the National Agricultural Research Organization (EMBRAPA) is created and given a very focused mandate to solve the country's food production problems. Several Brazilian states also replicate the model. At the time, EMBRAPA's founders had a small pool of qualified scientists originating from DNPEA, but clearly not enough, so within the first few years of operation, Embrapa sends over 1,500 young scientists abroad to obtain Master's and Doctoral degrees. At the same time, Embrapa embarks on strategic alliances with international partners, such as USDA-ARS in the USA, CIAT in Colombia, INRA in France, JICA in Japan, and others. Initially, Embrapa is organized according to commodities, with research centers specializing in particular products such as soybeans, rice and beans, cotton, beef cattle, dairy cattle, swine and poultry, and so on. Brazilian universities are also stimulated to expand their post-graduate programs, with new funding mechanisms (e.g., CAPES, CNPq) for stipends and research projects.

1985 - Present

The return to democracy in 1985 occurs during a period of economic near-collapse in Brazil, with hyper-inflation running over 1,200% in 1989. By then the investments in ARD have started to pay off, with the development of soil amendments to correct for nutrient-poor acid soils, and introduction of tropically adapted soybeans, pasture grasses, and other crops. Further innovations, however, are hampered by the dire economic situation on the one hand, and weak protections for intellectual property (IP) on the other. In the mid-1990s, several new policies and laws set the stage for what can only be termed an explosive expansion of Brazilian agriculture. The Plano Real of 1994 creates a new currency and stabilizes the exchange rate, bringing inflation under control in a painful but necessary way. Brazil was placed on

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the US Commerce Department's Priority Watch List in 1988 for failing to protect intellectual property rights. The Uruguay Round of GATT (General Agreement on Tariffs and Trade) results in the creation of the World Trade Organization and the TRIPS (Trade-Related Aspects of Intellectual Property Rights) Accord in 1994. In 1996, Brazil enacts a new and more muscular Industrial Property Code in accordance with the provisions of TRIPS. Unlike previous laws, the new Code allows for patents related to food, chemicals, biotechnology, and foreign patents are recognized. This is followed in 1997 by the new Cultivar Protection Law, and by the Innovation Law in 2004. Stronger IP protection, coupled with a more stable economy and expanding agriculture, induces multinational and domestic companies to invest in the Brazilian market. Companies such as Monsanto, Syngenta, Pioneer, BASF and others introduce new cultivars and chemicals, both imported as well as locally-developed in their own research facilities in Brazil.

By the late 1980s, the original goals of territorial sovereignty and food security have been largely achieved, but at a cost. Large scale deforestation, loss of wildlife habitat and endangered species, soil erosion and water andair pollution now become important concerns. In 1989, a new Law creates the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA). IBAMA is responsible for formulating and enforcing environmental protection policies in Brazil. Among their many activities is the enforcement of the Forestry Code. The Forestry Code of 1965 established that landowners must retain 20% of their property in native vegetation (legal reserve) nationally (50% in the Legal Amazon). A revision in 1996 expands the legal reserve in the Amazon region to 80%. In 2001 the Code is revised again to establish legal reserves of 35% in the Cerrado region. The most recent Code, from 2012, maintains the regional legal reserves, but expands the riparian exclusion zones. This series of Code revisions has the effect of placing many landowners, who were required by the government to clear land in order to obtain titles, into non-compliance, subject to fines, frozen credit, and even dispossession.

International environmental concerns also impact Brazilian policy and agriculture, specifically climate change. Starting with the Kyoto treaty and culminating in the Copenhagen accords in 2009, Brazil makes a firm commitment to reduce greenhouse gas emissions by almost 40% by 2020, 64% of which through reduced deforestation but also improved energy efficiency (20%) and improved agronomic practices (16%). New lines of very favorable credit are established aimed specifically at Low Carbon Agriculture, financing things like zero-till cropping, integrated crop-livestock-forestry projects, recovery of degraded pastures, and biological nitrogen fixation practices.

The new Constitution of 1988 allows redistribution of unproductive farms to landless peasants or creation of ecological reserves, with indemnization due to previous landowners. INCRA is tasked with analysis and evaluation of each case, and results are mixed. For each case of successful reforms, there are others in which peasants abandon or sell the lands they receive in the process. Government policies promote smallholder production by, for example, special lines of credit and preferential purchases for school lunch programs. Non-compliance with more stringent environmental and labor regulations combined with the possibility of invasion by landless peasants and disappropriation by INCRA create insecurities among landowners. In obedience to the law of unintended consequences, medium-size farms tend to disappear in favor of larger and more consolidated landholdings.

Future

Brazilian agriculture continues to expand, if not in occupied area then certainly in terms of productivity and global impact. Agricultural exports account for around $95 billion in net revenues, compared to around $45 billion in the national balance of trade. Public policies continue to favor investments in infrastructure, legal

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protection, human resources and ARD. This is complemented by a vigorous private sector, ranging from agricultural producers to domestic companies and multinational corporations.

However, as Brazil has became a big player, some problems have started to appear. First, current infrastructure and logistics are inadequate to accommodate the rapid increase in exports. Historically, Brazilian ports, roads and railways were developed to serve the south and southeast regions, while production is now concentrated in the Midwest. Second, this increase has also overtaxed support services provided by the government, such as the inspection services by the Ministry of Agriculture. A third issue could be the most difficult to navigate – market access. Traditionally access to agricultural markets is highly protected and regulated, and as Brazil increases production access will be more and more difficult.

Conclusions

The rapid development of Brazilian agriculture was the result of a deliberate government strategy aimed at securing Brazil's territorial sovereignty, achieving food self sufficiency, and expanding its economic base. Its success was based on public policies to encourage land occupation, protect intellectual property, and invest in science and technology. More recent policies aim to enhance the sustainability of agricultural production. The importance of a legal framework to promote private investment to complement public investments cannot be overstated.

NEWS FROM THE MEMBERS

ASAP

News from our Australian member: the Australian Association for Animal Production

2014 ISNH/ISRP Conference

The first ever combined conference of the International Society of Nutrition of Herbivores and the International Society of Ruminant Nutrition together with the Biennial meeting of the Australian Society of Animal Production is just around the corner to be held in the wonderful spring environment of Australia's national capital Canberra from September 8-12.

The Program Committee wish to thank authors for their efforts in making in excess of 750 excellent abstract submissions for the Conference.

Program Feature - Field Trips

Three really interesting field trips have been organised for Friday 12 September and can be booked at http://herbivores2014.com/registration.html. Field trips are inclusive for full registration and include all transport.

Sheep Tour

The region to the west of Canberra is home to arguably the world's best superfine Merino wool and prime lamb producing sheep flocks. This tour will visit progressive producers of wool and prime lamb to see their sheep and learn of their innovations and strategies to sustain profitability in a challenging world marketplace. Topics will include health, nutrition, genetic improvement, reproductive efficiency, lamb survival and product marketing. Delegates will also view the picturesque countryside and historic towns that are dotted throughout the region.

Dairy Tour

Participants will visit the world-first pasture-based robotic rotary AMR at the University of Sydney's Dairy Farm "Corstorphine" on the South West fringe of Sydney. Corstorphine is an intensive pasture-based system milking 400 cows on only 75 hectare of milking platform. You will be among the first to see how this newly installed futuristic system works to improve productivity and reduce labour costs on farm. The visit will be hosted by the FutureDairy Research team (www.futuredairy.com.au), who are international experts in pasture-based robotic milking and intensive dairy systems.

Beef Tour

The south western slopes of NSW, including the region around Canberra is an important beef breeding and pasture finishing area for Australia's

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Southern Beef Production industry. It is also a strong seedstock breeding area that supplies genetics to all parts of Australia. This tour will visit both commercial and seedstock breeders to study current production and marketing trends. Delegates will also have the opportunity to learn about developments in pasture production aimed at optimising the efficacy of cattle production from this feed base.

EAAP

Message from the European member: the European Federation of Animal Science (EAAP)

This is the message from the Aarhus University Rector, Brian Bech Nielsen, to invite scientists, technicians, policy makers and livestock industry representatives to participate to the EAAP Annual meeting:

The Danish organizing Committee is pleased to welcome you to the 65th Annual Meeting of the EAAP. The congress is a unique opportunity for industry and scientists to meet and acquire new knowledge as well as to exchange experiences within animal science. The meeting will take place in Copenhagen from 25th to 29thAugust 2014. Last time Denmark hosted the EAAP meeting was in Aarhus in 1993.

A main theme of the meeting will be "Quality in Animal Production" dealing with product quality as well as resource efficiency, sustainability, animal welfare and agro-ecology. The program will cover various thematic topics such as animal genetics, animal nutrition, animal management and health and animal physiology and also cattle, sheep and goat, pig and horse production and livestock farming systems.

We expect approximately 1,300 delegates from more than 40 countries

During the meeting, participants will have the opportunity to attend a number of selected oral presentations and study posters from leading scientists from all over the world. Workshops will be arranged with presentations and discussions of recent research contributing to sustainable and responsible livestock farming. Results from successful project cooperation between international research groups will be presented. Focus will also be put on knowledge exchange towards innovation.

We foresee a fruitful scientific meeting which also allows you to enjoy Copenhagen with its many cultural attractions and social events. We look forward to welcome you in wonderful Copenhagen in August 2014 for a highly professional, successful and enjoyable event.

For further information please visit the conference website: www.eaap2014.org

ASAS

News from our American member: the American Society for Animal Science

One of the best parts about getting ready for the meetings is reviewing society accomplishments over the last year. ASAS has a large number of committees that engage more than 400 individuals within our membership per year. Committee workloads vary from year to year. However, we have several standing committees that meet monthly – and wow their dedication and engagement show. See some highlights below. To hear from all of our major committees, members should attend the 2014 ASAS Business Meeting on July 23 at 9:30 am in room 2104A of the convention center.

Public Policy Committee: The Public Policy Committee is a relatively young committee and it meets monthly without fail. Here is what this committee over the last 12 months:

Conducted 4 Washington DC Snack and Facts. Over 50 individuals on Capitol Hill attended each Snack and Fact. Attendees included staffers, congressman and high-level agency staff. In addition, before and after each Snack and Fact, the committee conducts Hill, Agency, and commodity group visits.

Published 13 issues of Taking Stock, DC. This is our most widely read issue of Taking Stock Monthly and averages over 1700 down loads each month.

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Reviewed and added to the ASAS Grand Challenge documents. The Grand Challenges were launched in 2012. Since launch the ASAS Grand Challenges have been cited in over 400 other documents.

Insured ASAS was represented at several DC events including a climate day initiate and the Animal Ag Alliance Meetings.

Interviewed, selected, and helped place the ASAS Science Policy Interns that are supported through the Zimbelman, Hafs, Glenn, and Britt Appreciation Clubs.

Worked with FDA to develop a series of regulatory webinars that have been viewed by over 600 individuals.

Communications Committee: The Communications Committee has the broadest charge and once again this committee is set to launch several new initiatives at JAM:

ASAS in partnership with ARPAS will launch the Career Learning Center (CLC). The CLC will provide organized continuing education for the members of both groups while leveraging over 500 hours of pre-recorded programming.

The Communications Committee organized the second Virtual Meeting for Midwest and is the driver behind the first ever JAM Virtual Meeting. No more worries about getting to every session. Every JAM oral presentation will be recorded. Symposium will be available to attendees within 24 hours of the symposium and 15-minute talks will be available within a week.

The Communications Committee is currently prepping to revamp the ASAS Image Gallery with a release date of the updated image gallery in January of 2015.

International Committee: This committee is in the process of planning and executing 3 major meetings in 2014 while enhancing our partnerships with several other North and South American animal science groups.

Finance Committee: Unlike the others, this committee doesn't get to launch new programs or make glitzy announcements to the membership, but as a committee they are one of our most important and hardest working. This committee meets monthly by teleconference after the financial statements are prepared by an independent accounting firm. They also meet twice a year in person to review all financials line by line, and they serve as needed as resource throughout our annual audit process. As ASAS has made large scale infrastructure changes (beginning in 2012) and programmatic changes to the annual meeting (beginning in 2013) this committee has had to work double time. ASAS Financials will be reviewed in full at the 2014 Business Meeting but here are some highlights:

After investing significant dollars in infrastructure in 2012, ASAS Finance Committee can report the following:

o In 2013 total cost of publication per page of JAS was $144, this is a decrease of $62 per page as compared with the 2011 number of $206 per page.

o In 2013 total IT and membership expense was $74,919 less than in 2011.

o Beginning in 2013, we changed the working model for JAM operations, where ADSA was responsible for all aspects of programming and finances for JAM in odd years, while ASAS is responsible in even years. In 2013, ASAS received approximately $26,000 in revenue and spent approximately $225,000 on the meeting, we were able to keep decrease in net change in assets to approximately $76,000.

o These results are in line with the financial plan presented to the Membership at a Town Hall during the 2012 annual meeting by Margaret Benson and in the 2013 Business Meeting.

ASAS has continued to grow and diversify our program base. As ASAS has added programs, it has done so in accordance with to our strategic plan which has called for us to provide additional membership services, enhance international programming, and focus on diversifying membership. In addition to its fiduciary duty to oversee the financial health of the organization, the ASAS Board has a legal obligation to promote activities and make expenditures that further our mission, which is to advance education and information in

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the field of animal science. Our Board understands that with this policy ASAS may spend more than it earns in some years.

ASAS remains financially strong. We finished 2013 with net assets that are double what the society had 10 years ago, we are solvent by all measures of the word, we have maintained our board mandate 6 month operating reserve at all times since establishment, and predicted cost savings from changes in vendors and service providers are being realized.

CAAV

News from our Chinese member: theChinese Association of Animal Science and Veterinary Medicine (CAAV)

In 2013, the Chinese Association of Animal Science and Veterinary Medicine (CAAV) carried out a series of activities to demonstrate its function:

-) Journals. On the celebration of the 60th anniversary of the "Chinese Journal of Animal Science" and of the "Chinese Journal of Veterinary Medicine", over 96 contributors including research specialists, industry supporters, influential authors and diligent staff have been awarded.

-) Meetings. CAAV hosted and organized the 11th World Conference on Animal Production (WCAP) in October. Over 2200 people from 58 countries attended the WCAP and 1471 research abstracts were submitted.
Furthermore CAAV held the International Porcine Reproductive and Respiratory Syndrome Symposium (PRRS) in May.
Domestically, CAAV held 33 meetings. Around 9199 people were involved and 3592 papers were received. For example, "China Rabies Annual Meeting 2013", the "Symposium on Application of Amino Acids and Feedstuff", "Forum of China Vitamin Industry", etc.

-) Science dissemination: in August, members of CAAV, academicians and professors from the Chinese Agriculture University visited Weining, (Guizhou) in Southwest China, to advise about protection of plants and grazing husbandry.
In September, the Branch of Veterinary Drug Science of CAAV disseminated information about the"Proper Application of Veterinary Drugs for Food Safety" at Jun village of Henan Province.
CAAV performed training (Lectures for Swine Healthy Feeding) for farmers and technical service personnel in 12 locations distributed across provinces all over China that included Henan, Fujian, Sichuan, Guangxi, Hunan, Liaoning, Anhui, Hubei, Hebei, Shandong, Jiangxi and Hainan.

-) In 2014, CAAV held the "4thSymposium on Zoonotic Disease" in Changchun, in May 29-31 and will organize the "Annual Meeting of CAAV 2014" in Guangzhou, Guangdong during November 7-10.

MEETINGS

TURKEY

The 2nd International Congress of Agriculture and Food

The 2ndInternational Congress of Agriculture and Food, organized in collaboration with Agriculture and Food Confederation and the Turkish organization "Askon", adopted the motto of "Agriculture for Every One". The primary concerns are to meet nutritional requirements of society with economically, ecologically and socially sustainable methods, to protect biological diversity and maintain it for the sake of society, to practice and encourage practicing modern, trustworthy and human oriented agricultural activities pursuing for the equilibrium between producers and consumers by having sufficient resources to compete on national and international platform with supports of

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agriculture and agricultural industry. With these objectives and targets, 2nd International Congress of Agriculture and Food will be held between 26 and 30 November 2014 in Antalya. The congress aims at gathering more than 3000 company managers from 80 different countries, academicians from 80 universities, bureaucrats, retailers, manufacturers, factory owners, chain restaurant and hotels managers, producers unions, agricultural cooperatives and leading companies and institutions; in other words all shareholders of the sector on national and international platform. The 2ndInternational Congress of Agriculture and Food also holds a great importance for showing Turkey's significant role in the global market and contributing to our government's vision of agriculture in 2023.

Sector shareholders will have chance to evaluate the agricultural and nutritional production, production technologies, import, export, created policies current and possible scientific contributions in the future on global level.

The congress will aim to be a successful platform to show Turkey's and other countries' potential in food and agricultural production, substructure, attained consciousness and technology, qualified manpower and the technical level of related companies.
The 2ndCongress will enable all partners to know and contact each other directly with symposiums, panels, workshops, dual-multiple interviews, commercial exhibition booths, tours to sample institutions, award ceremony, cocktail, dinner meetings, opening and closing ceremonies and other special programs. The participants will have the chance to see the micro and macro sceneries of agriculture and food sector that will provide the possibility of learning and evaluating local, regional, national and international business opportunities.

ISAG

The 34th ISAG Conference

The International Society of Animal Genetics (ISAG), in cooperation with the Local Organizing Committee, will held in Xi'an, China, the 34thISAG Conference from July 28thto August 1st, 2014. The 34th ISAG Conference is co-hosted by Chinese Academy of Engineering (CAE), Shaanxi Provincial Government, and jointly organized by China Agricultural University and Northwest Agriculture & Forestry University.

From its beginning, ISAG has been devoted to the study of the immunogenetics, molecular genetics and functional genomics of economically important domesticated animals. ISAG is a scientific society that promotes scientific research, facilitates research communication and disseminates knowledge among scientists worldwide. The biennial ISAG conference will be in its 60th yearand will be, for the first time, organized in China.

The 34th ISAG Conference will bring together researchers from aroundthe world, who are conducting state-of-the-art research in animal genetics and life science. There will be a series of inspirational scientific and social programs that enable the delegates to present edge scientific innovations and exchange research ideas.The conference will also be a great opportunity for the industries to showcase their latest products, services or activities to a diverse national and international audience.

DEER

First Announcement for the 8th International Deer Biology Congress and International Wildlife Management Symposium

July 27th-31th, 2014 (Harbin, China)

The 8th International Deer Biology Congress and International Wildlife Management Symposium (8th IDBC&IWMS) will be held in Harbin, China, on July 27th-31th, 2014, which is sponsored by the Northeast Forestry University, the Scientific Steering Committee of the 8th International Deer Biology Congress and the Southern Illinois University, etc.

The 8th IDBC&IWMS will highlight cutting-edge advances in all major disciplines of biology, conservation, management, productions, ethics etc, of deer biology as well as management and conservation of other wild species. This five day event will feature recent research in the form of lectures and posters. A number of important researchers have been invited to give plenary lectures at the conference. We

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encourage our colleagues from all over the world to contribute to a successful conference.

Participants can obtain detailed information on from **http://8th-idbc-iwms.yolasite.com.** Official language of 8th IDBC&IWMS is **English** and all registration information, abstracts, poster and oral presentation must be in **English**.

WAAP members are: ADSA, AHAT, ALPA, ANA, APSK, ASAP, ASAS, CAAV, CSAS, EAAP, IAAP, JSAS, KSAST, MSAP, NSAP, PSAS, SASAS, TSAP.

The *World Animal Science News* is the Official WAAP Newsletter. The Newsletter update about activities of the global animal science community, presents information on leading research institutions in the world and also informs on developments in the industry sector related to animal science and production. The Newsletter is sent to all WAAP Members and to many thousands of animal scientists in every corner of the world. You are all invited to submit information for the newsletter. Please send information, news, text, photos and logo to eleonora@eaap.org WAAP Secretariat is located at the following address: Via G. Tomassetti 3, A/1 - Rome (Italy). Tel.: +39-06-44 20 26 39; E-mail: waap@waap.it Production staff: Andrea Rosati, James Sartin, Eleonora Azzaro, Milan Zjalic. Graphics design and layout: Danilo Domenici and Gianfilippo Ercolani