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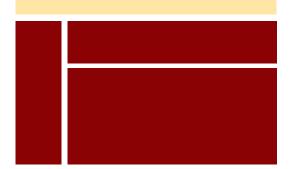
Animal Husbandry Commissioner, Govt.of India DDG (Animal Science), ICAR Director General, RVS, Min. of Defence President, Veterinary Council of India

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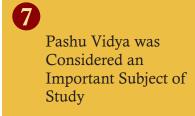
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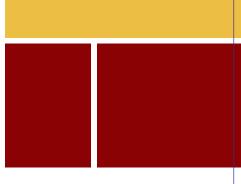
ISSUE HIGHLIGHTS ...

New Homologus Lumpy Skin Disease Vaccine: Commercial Production

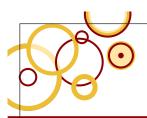


How Many Animal Species Caught Covid?









EDITORIA EDITORIS DESK

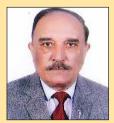
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Dear Esteemed Fellows

The National Academy of Veterinary Sciences (India) has indeed done excellent and commendable job in publishing and regularly distributing newsletter (NAVS News Vibes) to all its fellows in India and abroad. The Newsletter not only covers the veterinary aspects to keep up to date about the activities of veterinary profession but also other important scientific activities in the world.

There is a need to highlight the national economical contribution of livestock, fisheries and poultry in terms of milk, milk products, eggs, hides, skin, animal power, transportation, soil fertility, games, sports, films and other allied activities besides meat and meat products. In addition, it should be highlighted about the ratio of central and states government expenditure to revenue from veterinary assistance and animal husbandry improvement.

I would like to thank the members of the Governing Council and Editorial Board for their consistent feedback for improving the content of the Newsletter. In addition, liberal financial support from donors is solicited to ascertain the regular publication of Newsletter and to enhance the Corpus Fund. Therefore, Governing Council members, researchers, NAVS Fellows and members are called upon to explore possible ways and means of improvement through their active participation as well as the incorporation of more Corporate/Institutional Members.

I humbly request all the members and fellows of the Academy as well as other professionals to share their outstanding professional achievements (awards, honors, important assignments etc.) accompanied by good quality color photographs with high resolution (as a separate file in png/jpg/jpeg/tif format) for inclusion in upcoming issues of the newsletter.

(Kindly send the information to : ldsinglanavs@gmail.com; ldsingla@gmail.com)

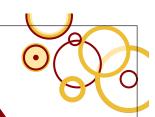
I look forward to receive your crucial annotations and beneficial suggestions to make **NAVS News Vibes** more informative, enriched and effervescent in the future.

Best regards

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L.D. Singla

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Dr Mandeep Sharma	Dr Minakshi Prasad	Dr Rajeswari Shome	Col SK Choubey
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HORIZON

PRESIDENT'S VIEWS & VISION

My dear revered and esteemed Fellows,

The veterinary profession and veterinary education must continue to change to meet the needs of society and our strategic plan should be a "solid" blueprint to help us reach new levels of performance, accountability and achievement. In this regard, I take this opportunity to thank all our colleagues who have appreciated our sincere efforts to "safeguard the interests of our profession and to gain greater recognition and acclaim for it" and have offered to us their suggestions and support from time to time.

The public, policymakers, and even medical professionals are frequently unaware of how veterinary medicine fundamentally supports both animal and human health and well-being. To address some of the problems faced by the veterinary profession, greater public and private support for education and research in veterinary medicine is needed.

Not only this, all veterinarians should rededicate themselves to serve the dumb animals that are unable to express their pain and symptoms of the disease. Every veterinary professional should be self-righteous that he belongs to a dignified profession on this earth that has pious duty to serve both animals and humanity at large. The burning issues and challenges being faced in animal nutrition, animal production and reproduction, animal and public health, bio-security and bio-safety, environmental pollution, disposal of animal waste, biogas production, value addition to food of livestock origin, namely milk and milk products, egg and egg products, meat and meat products, fish and fish products; climate change and global warming scenario, should be discussed in detail along with possible solutions at every forum.

Further, nutritional security is an integral component of food security, which should ensure not only sufficient food availability but also a balanced food providing required energy, protein, micronutrients, vitamins, antioxidants, nutraceuticals and other health promoting attributes.

Livestock sector has tremendous potential to cover nutritional security provided the problems and challenges faced by the livestock farmers, particularly shortage of feed and fodder, inadequate health cover, supply of vaccines & diagnostics, high incidence of



infertility & reproductive disorders, micro nutrient deficiency, late puberty, long inter-calving period and burden of unproductive animals are addressed properly.

In order to protect the community health, the country's preparedness in terms of food safety also needs to be put on strong footing by creating appropriate mechanism for sanitary and phytosanitary monitoring and certification of foods of animal origin through accredited laboratories.

In order to optimize production and productivity in the livestock sector, it is imperative that stringent feed quality standards are developed and enforced with effective participation of Veterinarians.

Although the financial strength of NAVS (I) has increased over the course of the time there is still a distance to travel to ensure that we are able to cover the costs of our activities in a befitting manner. Our members and Fellows are, and have always been, at the heart of everything we do. Accordingly, all fellows and members are invited to actively participate in various activities of the Academy and provide valuable opinions. Please submit them by email and send a copy to my personal mailbox. Rest assured that these suggestions will have my full attention.

Kind regards

Cordially yours

(DVR PRAKASH RAO)



THE ACADEMY

EVENTS & ENDEAVOURS

Governing Council Meeting of the Academy

The 13th Governing Council (GC) meeting of NAVS (I) was held at VCI meeting room, August Kranti Bhawan, Bhikhaji Cama Place, New Delhi on 20 September, 2022 at 11.00 AM. The meeting started with the welcome address by Dr DVR Prakash Rao, President NAVS (I). The President expressed his thanks to all the GC members and Ex-Officio members of the Academy for taking out time from their busy schedules for attending this meeting. The Minutes of 12th GC meeting held at MAFSU, Nagpur on 19 Jun 2022 were confirmed as there was no point from any of the members.

- 1. The following agenda points were discussed and decisions taken accordingly:
- (a) Extension of receipt of all NAVS (I) awards: The last date of receipt of applications of the following awards was extended up to 30 November 2022:
 - (i) Fellowship
 - (ii) Associate Fellowship
 - (iii) Membership
 - (iv) Dr CM Singh Award
 - (v) Dr DVR Prakash Rao Award
 - (vi) Dr Vallabh Mandokhot Award
 - (vii) Young Scientist Award
- (b) Guidelines for Dr RK Sharma Award: Description & rules, application form and score card for Dr RK Sharma award were formulated by the committee and forwarded to all GC members for their perusal and comments/ suggestions, if any to discuss during the next GC meeting.
- (c) Review of expenditure on account of travel, cost of medal, lodging & boarding, printing of certificates etc. viz a viz cash award: All members reviewed the total expenditure on the subject and decided that the travel cost of recipients/awardees of Dr Vallabh Mandokhot Award and Young Scientist Award, will be reimbursed (to and fro 2nd AC mail/express/super fast train fare) by NAVS (I) on production of original receipts/tickets.
- (d) Progress on NAVS (I) Rules & Regulations: The committee for amendment of Rules & Regulations was re-constituted and it was decided that the committee will look into the most salient points which require immediate change/amendment. The committee constituted is as
- (i) Maj Gen Shri Kant SM, VSM (Retd)
- (ii) Prof (Dr) AM Paturkar
- (iii) Dr Inderjeet Singh
- (iv) Prof (Dr) MP Yadav
- (v) Prof (Dr) KML Pathak
- (vi) Prof (Dr) AC Varshney
- Chairman
- Member - Member
- Member
- Member
- Member

- Member (vii) Dr SK Gupta - Member (viii) Dr Minakshi Prasad -Member (ix) Dr DN Garg (x) Dr Nem Singh -Member (xi) Maj Gen ML Sharma (Retd)
- (e) Discussion on Website: Mr Ankit Srivastava of Infozone IT Services (P) Ltd, Karolbagh, New Delhi made presentation to all GC members. The members decided to engage their company for re-designing, updation/ maintenance of our website (www.navsindia.org). The Academy will pay Rs.30000/- (Rupees thirty thousand only) for re-designing/re-structuring/re-installation of our existing website and Rs. 10000/- (Rupees ten thousand only) for Annual Maintenance/ Updation.

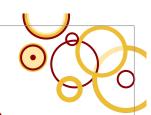
-Member

President's follow up meeting with Dr Mohan Bhagavat Ji at Chennai

President NAVS (I), Dr. Prakash Rao had a follow up meeting with Hon. Shri (Dr.) Mohan Bhagwat Ji, President Rashtriya Swayam Sevak Sangh regarding an appeal previously made to him and Shri Parshottam Rupala Ji, Cabinet Minister for Fisheries, Animal Husbandry and Dairying on June 20, 2022 during 20th Annual Convocation-cum-Scientific Convention at Nagpur to carve out Veterinary and Fisheries Research Institutes as ICVFR under the ministry of fisheries, animal husbandry and dairying which can result in very promising growth of the animal husbandry activities that has a potential to contribute at least 20 lakh crores to the GDP next 5 years. Dr. Rao also reminded Dr. Bhagwat Ji regarding providing a reasonable office space along with financial assistance for day to day functioning of the Academy. The fruitful discussion was made during follow up meeting with a positive response from Hon. Dr. Bhagwat ji.



Dr DVR Prakash Rao, President NAVS(I) with Hon. Shri(Dr.) Mohan Bhagwat Ji, President Rashtriya Swayam Sevak Sangh during follow up meeting



IN FOCUS

LUMPY SKIN DISEASE

Development of a new homologous live-attenuated lumpy skin disease vaccine in India



Naveen Kumar Email: Naveen.Kumarl@icar.gov.in) National Centre for Veterinary Type Cultures, ICAR-National Research Centre on Equines, Hisar.

Lumpy Skin Disease (LSD) was reported for the first time in 1929 from Zambia (Africa). For many decades, it was restricted to the African countries. In the beginning of 21st century, it started spreading beyond Africa. Since 2012, the disease has spread into several countries in Europe and Asia. India experienced its first outbreak in August 2019 from Odisha (Kumar et al., 2021: PLoS One 16(1), e0241022). During the first 2 years, LSD was mainly restricted to the eastern part of the country. In 2022, it spread all across the country and the outbreaks, particularly those occurring in Gujarat, Rajasthan and Punjab were highly lethal, with high morbidity and mortality. According to the Department of Animal Husbandry and Dairying, Government of India, LSD has affected about 3.3 million cattle including 1,85,600 deaths till date.

LSD is characterized by fever (40.0°C-41.5°C), hypersalivation, lacrimation, nasal discharge, anorexia, and weakness, followed by the development of skin nodules on the entire surface of the body. The skin nodules may also extend into the muscular layer and may rupture. The resulting wound can develop necrotic tissue and scarring and may be invaded by secondary bacterial/fungal infection with severe complications. These events eventually result in a sharp decline in milk production, abortion in pregnant cattle and sterility in bulls.

LSD virus (LSDV), the causative agent of lumpy skin disease, is a *Capripoxvirus* that belongs to the family Poxviridae. Sheep pox virus (SPV) and goatpox virus (GPV), the two other capripoxviruses are closely related and are believed to cross-react with each other.

Therefore, SPV/GPV-based heterologous vaccines are usually thought to induce cross protection against LSDV infection in cattle, particularly in emergency situations where a



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Indian Council of Agricultural Research,
Krishi Bhawan, New Delhi.

homologous (LSDV-based) vaccine is not available. Based on this assumption (without any experimental evidence), Department of Animal Husbandry and Dairying (Govt. of India) also authorized the use of a heterologous vaccine (goat pox vaccine) against LSD in cattle. However, goatpox vaccine could provide partial or no protection against LSD in cattle in India.

The inactivated LSD vaccine and heterologous LSD vaccines are less efficacious. Only homologous live-attenuated LSD vaccine (HLALV) is considered to provide optimal protection against LSD in cattle. Most of the HLALVs (LumpyvaxTM, Bovivax-LSDTM, LumpyShield-NTM and MEVAC LSD) contain the well-known South African Neethling strain. The use of Kenyan sheep and goat pox (KSGP) virus strain is limited to Egypt, Ethiopia and Israel.

The National Research Centre on Equines, Hisar, in collaboration with the Indian Veterinary Research Institute in Izatnagar (India) has recently developed and commercialized a new HLALV (Lumpi-ProVacInd), based on a local LSDV strains, isolated from a sick cattle from Ranchi (Jharkhand, India) in 2019 (Kumar and Tripathi, 2022: Virulence 13(1), 1943-1944). HLALVs are known to cause swelling at the site of vaccination or rarely generalized small-size skin nodules and a temporal reduction in the milk yield, which is often referred to as "Neethling disease" or "Neethling response". However, as compared to the Neethling or KSGP-based vaccine strains, Ranchi strain-based vaccine has a high safety profile with no or minimal Neethling response (Kumar and Tripathi, 2022: Virulence 13(1), 1943-1944).

Therefore, this indigenous vaccine has great export potential. Commercial production of the vaccine will start soon and will be used for control and eradication of LSD in India.



BEYOND THE BOUNDARIES:

HOMO SAPIENS

Homo sapiens and the Regnum Animale- Plantis Too



Tarun Shridhar
Former Secretary,
Ministry of Fisheries,
Animal Husbandry and Dairying,
Government of India

domestication of plants and animals commenced when the ice age began melting down. The occurrence of this phenomenon is

The origin of modern humans or Homo sapiens from the great apes is said to date back to 200,000 years ago, and till about 12,000 years ago hunting of wild animals and gathering of wild plants were the primary means of subsistence for our ancestors. The transition to domestication of plants and animals commenced when the ice age began melting down. The occurrence of this phenomenon is recognized to have started in

the Fertile Crescent, the crescent shaped region of the Middle East and west Asia, China, Mesoamerica, Andes/Amazonia, Eastern United States, tropical West Africa, Ethiopia, and New Guinea. From these handfuls of initial homelands of agriculture, a small and restricted number of domesticated species were progressively introduced across the globe as the new bred farmers began migration to new regions. This gradually resulted in societies exercising control of food production conferring to these farmers' huge demographic, technological, political, and military advantages over neighbouring hunter-gatherers, allowing them to impose their now stationary lifestyle. The history of the past millennia consists of tales of hunter-gatherer societies being driven out, infected, conquered, or exterminated by farming societies all across the world. Today, most people on Earth consume food that they produce themselves or that someone else produces for them. Now the few handful communities of huntergatherers are at the verge of abandoning their lifestyles and shall soon disintegrate, thereby ending our millions of years of commitment to the hunter-gatherer lifestyle.

According to the United Nation's Food and Agriculture Organisation (FAO), in the year 2018, the world's primary agricultural production was more than 9.2 billion tons representing a 50% increase compared to that in 2000. While a large number of crops are cultivated and harvested around the world, just four individual crops accounted for half the global production of primary crops in 2018: sugar cane (21 percent of the total, with 1.9 billion tonnes), maize (13 percent, with 1.1 billion tonnes), rice (9 percent, with 0.8 billion tonnes) and wheat (8 percent, with 0.7 billion tonnes). Potatoes and soybeans each accounted for an additional 4 percent of world crop production. Globally, less than two-thirds of crop production is allocated to human food, versus 35% to animal feed, and 3% for bioenergy or other industrial

products. It is important to highlight that only about 15 plant species and less than 10 animal species supply more than 90% of worldwide agriculture and livestock production. Four crops (wheat, rice, corn, and potato) account for more food production than all other crops combined. Inversely, hitherto robust and lively hunting and gathering have today become secondary, and most often recreational, activities that contribute little to global food security; the only significant exception being the consumption of wild meat in a few regions, notably in Central Africa. Even the toughest of humans now consume a diversity of food products across the globe from these same domesticated plant and animal species.

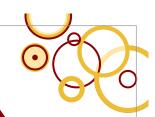
Domestication is distinct from Taming. Taming implies exercising control over an individual animal, teaching it to obey; taming is a tedious business as it has to be repeated again and again for each single animal. Domestication, on the other hand, happens to a whole species or a population of wild animals. It also leads to the genetic modification and manipulation (controlled breeding) of a wild animal to establish a new breed or cultivated variation which lives symbiotically alongside humans.

The earliest agriculturists kept some semi-domesticated animals to assist in hunting. Sometime later, actual keeping of livestock specifically as a food source began in tropical or semi tropical regions of the Middle East. The early farmers also discovered that whenever water was available, crops could be produced during most of the year. Thereafter, domesticated animals became an invaluable resource with smaller ruminants, goats, sheep, pigs and poultry kept for food production and large ruminants providing the power to operate irrigation systems, ploughs and other farm implements.

Further innovations were exploitation of the milk of mammals, and this graduated to selection of individuals for prolonged lactation, leading to development of dairying. Also, the discovery of methods for incubating birds' eggs without nesting hens led to increased availability of poultry products

The Romans were the first to recognize and adopt improved farming methods such as irrigation systems and oxen drawn ploughs. These techniques were subsequently introduced throughout western Europe, along with the Roman-devised crop rotation and fallow systems to rejuvenate land resources.

The chemical compounds forming animal flesh are recognized to be concentrated, easily digested and capable of satisfying all human nutrient requirements. Thus, the earliest *Homo sapiens* were carnivorous. Since game was abundant, it supplied the entire dietary needs of the population. Hunting



other animals required considerably less time and effort than the drudgery of gathering plants. Jack Cohen, the American Biologist has another interesting theory which asserts that a taste for animal flesh was a prerequisite for the development of intelligence since: "You don't need much intelligence to sneak up on a blade of grass."

Soon domestic animals or livestock became the societies' major source of animal protein, and today we get most of our animal protein from cows, pigs, sheep, and chickens, with game such as venison or wild boar just a rare delicacy, even though illegitimate in several countries. In addition, some big domestic mammals are a boon to the vegetarian communities serving as sources of milk and of milk products such as butter, cheese, and yogurt etc., thus yielding several times more calories and nutrition over their lifetime than if they were just slaughtered and consumed as meat.

Big domestic mammals also interact with domestic plants in two ways to increase crop production. First, as any farmer knows, crop yields can be greatly increased by manure applied as fertiliser. Even with the modern availability of synthetic fertilisers produced by chemical factories, the major source of crop fertiliser today in most societies is still animal manure. Manure has been valuable, too, as a source of fuel for fires in traditional societies.

The ever evolving knowledge and experience of domestication of erstwhile wild animals developed into the modern science of Animal Husbandry, a terminology derived from the word "Husband" whose archaic meaning is quite at divergence from the commonly assigned meaning today. The word "husbandry" has nothing to do with marriage, at least not in this day and age. In fact, the word "husband" itself didn't mean a married man when it first showed up around the year $1000 \, \text{or so}$.

Long before husbands became hen-pecked, they were robust men of the Earth - farmers, in other words. The noun "husband" originally meant a male head of a household, and subsequently husbandry did not mean being a husband, but referred to farming, livestock farming to be precise. If you cultivate the land or breed animals, you are practicing husbandry.

Old usage tells us that there is a husbandry also of the land, of the soil, of the domestic plants and animals- obviously because of the importance of these things to the household. That meaning died out, but its current meaning survives as a remnant of it.

Today, one also uses the term "crop husbandry", which refers to raising crops. To husband is to use with care, to keep, to save, to make last, to conserve; in short a holistic and responsible management.

Portia, the rich and beautiful protagonist in Shakespeare's popular play The Merchant of Venice meaningfully says, "Lorenzo, I commit into your hands / The husbandry and manage of my house." In fact, most and perhaps all of industrial agriculture's manifest shortcomings and even failures are the

result of an attempt to make the land and livestock produce more and more without husbandry.

It is an inference universally accepted that domesticating plants, and more importantly animals marked a major and dramatic turning point for humans: the beginning of an agricultural way of life and more permanent and stable civilizations. The domesticated creatures also became integrated into the most basic and widespread rituals of the culture. Curiously, all across civilisations and religions, the domesticated animals came to symbolize order as opposed to the chaos of the untamed world.

Hinduism, as do some other religious beliefs, does not recognise much spiritual distinction between animals and men; both have souls, perpetually passing from men into animals and back again; all these species are woven into one infinite web of *karma* and reincarnation. In Hinduism animals occupy an elevated status. It is said that when Brahma created the animals, he hid a specific secret in each of them to signify their spiritual importance to humans. It is also believed that Shiva imparted to each of them specific states of yogic awareness

In ancient India, knowledge of the animals, or *Pashu Vidya*, was considered an important subject of study. Many of us believe that animals may contain the souls of our ancestors or the animals may be reborn as friends and family members.

In the race and competition for scarce natural resources and nature's bounties, we may at times appear adversarial, yet the *Homo sapiens* and the *Regnum animale* are inextricably intertwined; *Plantis*, quietly, supports both.

Professional Visit to Melbourne for Potential Collaborations

Dr Mandeep Sharma, a Governing Council member and Dean College of Veterinary and Animal Science, Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya Palampur visited the University of Melbourne to make discussions on potential collaborations between CSK HP Agricultural University Palampur and School of Agriculture and Food, Melbourne Veterinary School and the Faculty of Science, The University of Melbourne.



Dr Mandeep Sharma during discussions on potential collaborations





FOOD FOR THOUGHTS

LIVESTOCK NEWS

Achieve Prosperity and Health through Better Livestock Production

Shri Bhagwant Singh Mann, Hon'ble Chief Minister of Punjab inaugurated the two days Pashu Palan Mela of GADVASU, Ludhiana (23-24 September 2022). S Laljit Singh Bhullar, Hon. Minister of Animal Husbandry, Fisheries & Dairy Development and Transport. Shri A Venu Prasad (IAS), Additional Chief Secretary to the Chief Minister and Dr SS Gosal, Vice-Chancellor, Punjab Agricultural University, Ludhiana graced the occasion. This mela was held in physical mode after a gap of three years due to Covid-19 restrictions. The slogan of the mela was 'Behold Science to Prosper' and the objective was to encourage scientific farming in the state. Dr Inderjeet Singh, Vice-Chancellor, GADVASU said that with Scientific Interventions one can touch the summit. The Hon. Chief Minister visited various stalls in the Mela and showed keen interest in the latest research and development activities in the livestock sector. GADVASU showcased research, educational and extension programmes at the Mela for the benefit of farmers. University publications on different subjects of livestock farming were also put on sale. The experts delivered talks on various aspects of livestock, poultry and fish farming, and acquainted the farmers about the mechanism and procedures to overcome the problem(s) being faced by them. The Mela witnessed an overwhelming response from farmers of Punjab vis-à-vis adjoining states. The chief minster appreciated the role of the University in upliftment of the livestock farmers of the state.



The Hon. Chief Minister, Punjab, Shri Bhagwant Singh Mann ji visited various stalls in the Pashu Palan Mela

Potential of Bilateral Cooperation Between India and New Zealand to Strengthen Foot and Mouth Disease Capability

Union Minister of Fisheries, Animal Husbandry and Dairying, Parshottam Rupala held a bilateral meeting with New Zealand Minister of Trade and Agriculture, Damien O'connor. The two sides discussed the potential bilateral cooperation to strengthen Foot and Mouth Disease capability to advance India's and New Zealand's primary sectors. During the meeting, both sides felt that there is much to learn from each other in the related fields. The discussions will help to enhance bilateral cooperation between the two countries.



Exchanging information and expertise will help build the knowledge and capability of each other's animal husbandry sector, which will have mutual benefits for both countries.

DISCLAIMER:

The views expressed by various authors in this publication are their own and not necessarily that of the NAVS(I). Further, news items related to selected scientific and academic advances published in this newsletter are sourced from varied sources, including scientific journals, newspapers, websites etc. They are solely meant for developing educational awareness among the members of the Academy.

INSTITUTIONAL LIFE MEMBERS (NGO)





CORPORATE LIFE MEMBERS









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SPLENDOUR SHINING FELLOWS

Conferment of Honorary Doctorate of Science to distinguished professionals

To mark their outstanding and meritorious contribution in the field of Veterinary and Animal Sciences, distinguished professionals Dr. Mahendra Pal Yadav, former Director, ICAR-IVRI and former Vice-Chancellor Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut; Dr. Kamal Mall Bujarbaruah, former Deputy Director General (Animal Science). New Delhi and former Vice-Chancellor Assam Agricultural University, Guwahati and Dr. Anil Kumar Srivastava, Vice Chancellor, Uttar Pradesh Pandit Deen Dayal Upadhyay Veterinary University and Cow Research Institute, Mathura have been awarded the Doctorate of Science (Honoris Causa) degree of IVRI Deemed University during the 10th Convocation of Deemed University on 23rd day of August 2022.



L to R 1. Dr BN Tripathi 2. Dr M P Yadav, 3. Shri SK Gangawar, 4. Shri Narendra Singh Tomar 5. Shri Kailash Choudhary 6. Dr.R. C Agrawal



L to R 1. Dr BN Tripathi 2. Dr KM Bujarbaruah 3. Shri Narendra Singh Tomar 4. Shri Kailash Choudhary 5. Dr.R. C Agrawal



L to R 1. Dr BN Tripathi 2. Dr AK Srivastava 3. Shri Narendra Singh Tomar 4. Shri Kailash Choudhary 5. Dr.R. C Agrawal



The photograph showing all the threes awardees. DrMP Yadav and Dr AK Srivastava are seen on sides and Dr KM Bujarbaruah is in the Centre

Congratulations to the NAVS(I) Fellows for the Conferment of Honorary Doctorate of Science by Shri Narendra Singh Tomar, Union Minister of Agriculture and Farmers Welfare, Government of India in presence of Shri Kailash Chaudhary, Union Minister of State, Ministry of Agriculture and Farmers Welfare, Government of India, Shri Santosh Kumar Gangwar, Lok Sabha MP, Bareilly; Dr Bhupendra Nath Tripathi, Deputy Director General (Animal Science), Dr RC Agarwal, Deputy Director General (Agricultural Education) Indian Council of Agricultural Research.

Prof (Dr) Veer Singh conferred upon National Fellowship of the Society

Prof (Dr) Veer Singh, Director Resident Instruction cum-Dean Postgraduate studies, Bihar Animal Sciences University, Patna was conferred upon National Fellowship of the Society for Promotion of Farm and Companion Animals (SPFCA), Patna on the occasion of 1st National Conference of the Society in recognition of his outstanding contribution to Veterinary and Animal Sciences. Congratulations to Dr Veer Singh, Fellow of NAVS for National Fellowship of SPFCA.



Dr Singh receiving Fellowship Award from Hon'ble Minister, Animal and Fisheries Resources Department, Government of Bihar and Dr. Rameshwar Singh, Vice-Chancellor, Bihar Animal Sciences University





TIDBITS

How many animal species have caught COVID? First global tracker has (partial) answers

Several animal species have contracted COVID-19. However how many species have been affected? And how many cases have there been in the animal kingdom? Those are difficult questions to answer-just as it's hard to come up with an accurate total for human cases, since many people don't report a positive test to health authorities. Now there's a first effort regarding compilation of a global database of animal counts. Amélie Desvars-Larrive, Professor at the University of Veterinary Medicine Vienna, and her team of Austrian researchers combed the internet for data from official sources. On July 23, her team in collaboration with the Wildlife Conservation Society published the first COVID data tracking dashboard for cases in animals in Scientific Data. (Animal Disease outbreaks and News-Asia: Edition: 183 Published: 9 August 2022, https://vis.csh.ac.at/sars-ani/)

WHO creates open forum to propose new name for monkeypox virus

The World Health Organization (WHO) has created an open forum to change the name of the monkeypox virus in an attempt to counter misconceptions and stigma around the disease's current name. The disease has so far been reported in 80 countries and has over 31,400 cases across the globe, Reuters reported. Brazil reported the first death due to the viral disease on July 31, 2022. In India, 10 cases have been reported after a woman in Delhi was confirmed to have monkeypox. So far, one death has been reported due to the infection in the country. Monkeypox is a viral zoonotic disease having common symptoms such as fever, skin lesions, lymphadenopathy, headache, muscle aches, exhaustion, chills or sweats and sore throat and cough. (https://www.who.int/news/item/12-08-2022-monkeypox--expertsgive-virus-variants-new-names).

Ticks: a potential bioterrorist agent

The population of ticks and their geographic ranges are increasing day by day. Ticks frequently carry many infections at once. A variety of diseases is spread by ticks for which there is no vaccination and, in some circumstances, no cure. From the perspective of bioterrorism, it is very obvious that ticks might spread a variety of illnesses that could be introduced and spread to people. Ticks are bioterrorist agents and were previously used in world war on a larger scale that killed thousands of people. Some vaccines are available for controlling their hazardous effects. Since the tick-animal-tick cycle frequently goes unreported and the illness in domestic animals frequently goes undetected, it is challenging to prevent or manage infection in animals and ticks. Tick management with acaricides can only be a practical alternative. However, a proper measurement should be taken in order to protect from its bioterrorism effect and also, we can protect ourselves by using insect repellent, tucking our jeans into our boots or socks, taking a shower when we get inside, and checking ourselves frequently for ticks.

(https://www.technologytimes.pk/2022/08/12/ticks-a-potential-bioterrorist-agen).

INSTITUTIONAL LIFE MEMBERS



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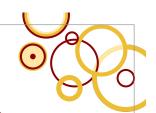
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Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana



Khalsa College of Veterinary & Animal Sciences Amritsar



BROOKE HOSPITAL FOR ANIMALS (INDIA)

An Organisation Committed to Equine Health & Welfare and the Development of the Marginalised Equine Owning Community

Brooke Hospital for Animals (India) or Brooke India (BI) is an affiliate of the Brooke, which is a United Kingdom-based international equine charity, focusing on the welfare and care of equines (horses, donkeys and mules). Brooke's vision is of a world in which working horses, donkeys and mules are free from suffering and have a life worth living.

Bl's journey in India towards equine
welfare started two decades back when it
was registered as a Section 8. Not for Profit C

Renu Devi, equine owner

welfare started two decades back when it from Sonipat, with her mule was registered as a Section 8, Not for Profit Company under the Companies Act. Equids in India mostly work in harsh environments like Brick Kilns and face never-ending health troubles. This situation was mainly due to a lack of financial resources and knowledge on good management practices amongst the equine owners and insufficient understanding of equine health care by Local Health Providers (LHP).

Bl's initial step as an intervention involved providing free veterinary services at different congregation points and organising Intensive Equine Care Camps (IECC) to spread awareness on welfare

oriented husbandry practices and preventable injuries & diseases. From 2006 onwards, BI started focusing on establishing permanent intervention units and started expanding its operations to other states such as Andhra Pradesh, Rajasthan,



IECC Camps Luniyavas donkey fair

Hyderabad and other parts of Uttar Pradesh. The BI team also introduced Community Engagement for exploring sustainable solutions for equine welfare and community development. This period saw the formation of male and female Self Help Groups called Equine Welfare Groups, the use of Participatory Rural Appraisal tools and increasing community participation. BI team saw the congregation of equines, equine owners, traders and local service providers at Equine Fairs as an excellent opportunity for a large-scale intervention. BI teams intervened to spread awareness on equine welfare issues, provide quality training on equine care and ensure equine welfare-friendly facilities and resources at these fairs.

BI teams also focused on strengthening the local service delivery system for working equines, including quality farriery services for hoof care, accurate and appropriate veterinary first aid during health emergencies, hair clipping, and welfare-friendly saddlery material. They also ensured compassionate handling while

delivering any of the services. These interventions were incorporated in Brooke's Theory of Change, in 2016. This theory promotes strengthened animal health policy environment and thriving equine owning communities.



Equines working at Brick Kilns

Currently, BI operates directly through 32 Equine Welfare Projects (EWPs) across 10 States and Union Territories in India, thereby reaching out to approximately 3.16 lakhs working equids and the equine owning community that owns/rears them. BI has multidisciplinary teams with core strengths in Animal Health & Welfare, and Community Development, including Human behaviour Change, Gender Empowerment, Livelihoods and Resilience. Some of the notable achievements made by the team over the years include:

- Advocating the revision of Glander's Compensation- From INR 50 to 25,000 for horses and INR 16000 for mules/donkeys
- Inclusion of Equids in Livestock under the National Livestock Mission Schemes and thereby making them eligible for equine insurance.
- Advocating the issue of Animal Welfare Board of India (AWBI) advisories for Equine Fairs, Shrines & Pilgrim sites
- Introducing Bl's innovative projects for ensuring sustainable availability of green fodder, through Azolla cultivation and Hydroponics techniques successfully across its intervention areas.
- BI teams worked throughout the COVID 19 pandemic. They supported the community by providing emergency treatments, alternative livelihood options, first aid kits and feed & fodder for the equines.

In the upcoming years, BI will focus on strengthening the

Community Based Organisations, linkages with government welfare schemes, have robust disaster response capacity, advocate policy revisions on equine welfare issues, and enhancing the knowledge and skills of veterinary students on animal welfare, compassionate handling and upskilling the local farriers and animal health providers.

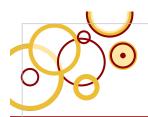
BI's team is proud of its journey and



Quality Farriery Services

aspire to keep bringing a positive change for vulnerable and marginalised working equines and the rural communities, whose lives we have not touched yet.





Introducing

Zydus AHL

For the First Time in India

VetPlasma



INDICATIONS AND USAGE

VetPlasma is used primarily to treat acute hypovolemia & shock in conditions like Blood loss, diarrhoea, etc

DOSAGE AND ADMINISTRATION

Daily dose and rate of infusion depend on the animal's blood loss, hemodynamics and on the hemodilution effects

Recommended Dose:

Large Animals (Cattle & Horse):

8-10 ml/kg body weight/day, up to maximum 20 ml/kg Small Animals (Dog, Cat, Pig, Sheep & Goat):

10-20 ml/kg body weight/day

Administer by intravenous infusion only.

The initial 10 to 20 ml should be infused slowly, keeping the animal under close observation due to possible anaphylactoid reactions

PRESENTATION

250 ml & 500 ml plastic bottle.



Restores Blood Volume Saves Life





Zydus Animal Health and Investments Ltd. (A wholly owned subsidiary of Cadila Healthcare Ltd.)

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