



Report

NATIONAL

CONFERENCE

for

Zoo Directors and Veterinarians

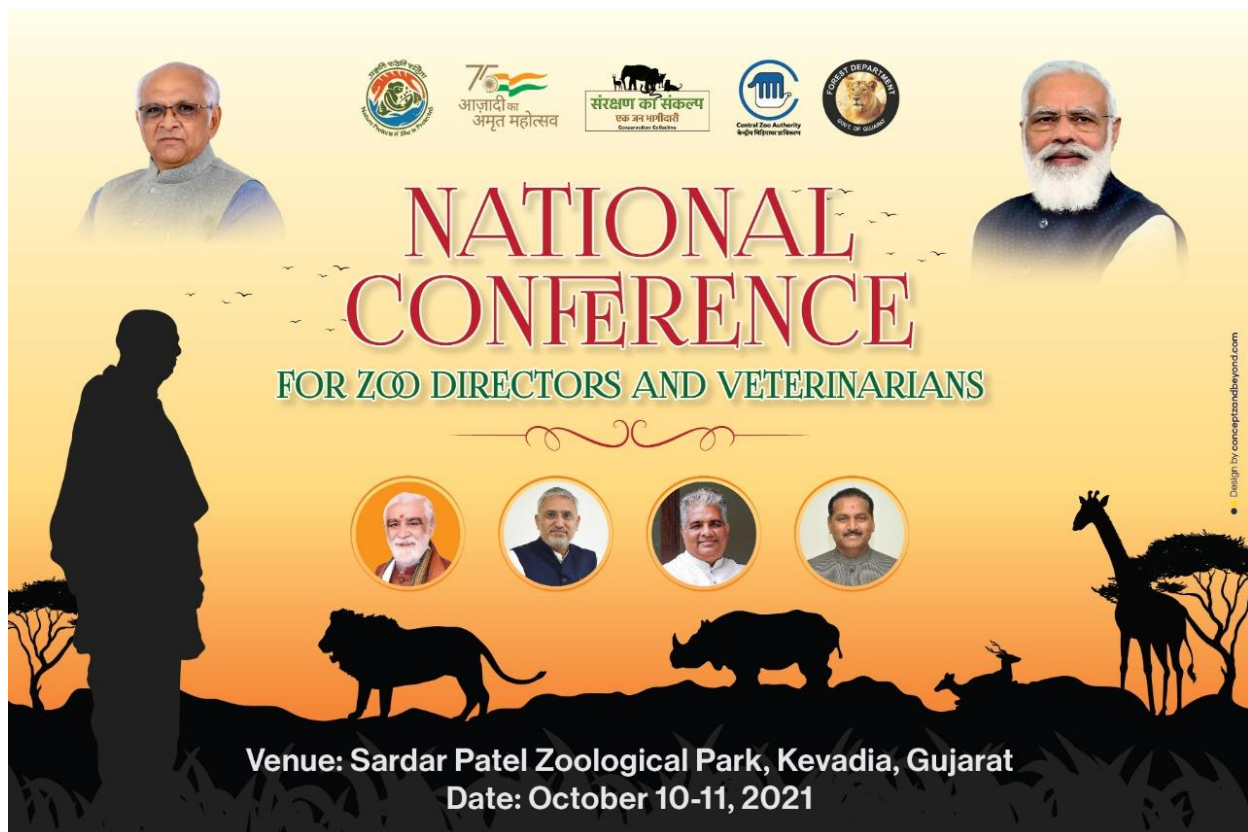


October 10-11, 2021

Sardar Patel Zoological Park, Kevadia, Gujarat



Background



Good zoos are local and global conservation agencies. They not only provide a critical haven for endangered species but also a unique environment to learn both from and about animals. These learnings can be shared with other zoos across the world and with conservationists in the field, who can use this critical information to carry out their work with species in-situ.

Zoos play an important role in the ex-situ conservation of wildlife through conservation breeding, rescue and rehabilitation, and research and educational programs. Many notable conservationists have recounted how a visit to a zoo started them on their path to preserving the planet. Zoos are vital for education and inspiration, with over 80 million visitors who can be inspired by visits to zoos globally every year. The crux of the work is improving the relationship between people and wildlife.

Despite the challenges brought forth by the pandemic in the past years, zoos in our country have taken up various initiatives to sustain and improve animal welfare. To provide a platform for discussions on the various challenges in managing zoos in India and further develop platforms for capacity building across various disciplines a National Conference for Zoo Directors and Veterinarians was jointly hosted by the Central Zoo Authority, New Delhi, and the Sardar Patel Zoological Park, Kevadia, Gujarat on October 10 and 11, 2021 at Kevadia, Gujarat. The workshop had over one hundred participants from across the country.

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Inaugural

The conference was inaugurated by Shri Ashwini Kumar Choubey, Hon'ble Minister for State, Environment, Forest & Climate Change, Government of India, and Shri Jagdish Vishwakarma (Panchal), Hon'ble Minister for State (Forest and Environment), Government of Gujarat. Other dignitaries present during the conference inaugural were Shri Soumitra Dasgupta, IFS, Additional Director General (Wildlife), Ministry of Environment Forest and Climate Change, Government of India, Dr. Satya Prakash Yadav, IFS, Additional Director General (PT), Member Secretary (NTCA) & Member Secretary, Central Zoo Authority, Shri Shyamal Tikadar, IFS, Principal Chief Conservator of Forest & Chief Wildlife Warden, Gujarat and Dr Sonali Ghosh, IFS, Director, National Zoological Park, New Delhi & Deputy Inspector General of Forest- Central Zoo Authority.

Dr. Satya Prakash Yadav welcomed the august gathering at the conference and set the tone for the discussions and deliberations over the course of the two days.

Shri Soumitra Dasgupta during his address mentioned that conservation of nature, particularly wild fauna, has remained a high priority of the Government since independence. He said that zoos play an important role in the ex-situ conservation of wildlife through conservation breeding, rescue and rehabilitation, and research and educational programs. And, that zoos through their unique initiatives have emerged as centers for education and awareness. He remarked that annual zoo visitation is approximately 8 crores, and it provides an opportunity to sensitize people of all age groups about wildlife conservation.

During the inaugural session, a web application ZOO-MIS developed by CZA was launched. This is a step forward towards achieving the vision of digital India. The application aims to create a centralized database of zoos in the country and further streamline the process of data management and increase efficiency & transparency. The quarterly issue of the CZA newsletter – Ex situ Updates (Vol. II, Issue 3) was released by the dignitaries.

Parallel to the inauguration, stalls were set-up for the exhibition of products and services related to Zoo Management. This included knowledge products from Central Zoo Authority, Gujarat Forest Development Corporation, UNICEF, Wildlife Crime Control Bureau, veterinary medicine, and formulations from animal feed companies among others.



Hon'ble Minister of State Shri Ashwini Kumar Choubey, during his inaugural address.



Hon'ble Minister for State (Forest and Environment), Government of Gujarat Shri Jagdish Vishwakarma (Panchal), during his address.



Dignitaries on the dais – from L to R – Dr S. P. Yadav – Shri Ashwini Kumar Choubey – Shri Jagdish Vishwakarma (Panchal) – Shri Soumitra Dasgupta



Hon'ble Minister of State launching the ZOO-MIS web application developed by the Central Zoo Authority.



Release of Central Zoo Authority's Quarterly Newsletter – Ex situ Updates – Volume 2 Issue 3 by the dignitaries.



Group picture after the Inaugural with the Hon'ble Ministers, dignitaries, and the participants of the National Conference for Zoo Directors and Veterinarians-2021.

Technical Sessions

Six technical sessions were held during the two days of the conference. The detailed program is placed as Annexure 1.

The sessions provided a broad overview of management challenges, capacity building and outreach programs, wildlife conflict and wildlife trade (challenges, identifying conflict individuals using wildlife forensics, options for management), linking in-situ and ex-situ conservation efforts including bio-security planning for endangered species, technology, design and innovation along with scientific data management, emerging wildlife diseases and introduction to One Health and the role of veterinarians in that paradigm and the role of zoos in conservation and citizen science.

Inputs were provided by zoo personnel from zoos across India and from institutions like Central Zoo Authority, Wildlife Institute of India, Indian Veterinary Research Institute, Centre for Cellular and Molecular Biology /Laboratory for Conservation of Endangered Species, Wildlife Crime Control Bureau, and some non-governmental organisations such as Wildlife Trust of India, Wildlife SOS.

October 10, 2021- DAY 1

Session I

Policy level mitigation for challenges in zoo management including administration, animal health care and welfare

The session was aimed at recognizing and incorporating the advancements in animal welfare and by sharing knowledge gained through programs related to outreach and conducting professional training for animal care staff.

The session sought to gather information by convening important discussions for policy changes zoos and how it can be applied to deal with the challenges in management, allocation of resources to studying and improving species-specific zoo animal healthcare and welfare.

The session commenced with an overview of the Central Zoo Authority delivered by Dr Sonali Ghosh. She described the basic structure and functioning of the zoos and the policies in place to assist their functioning. The Central Zoo Authority had taken on an ambitious task of putting together a vision plan for zoos in India and strengthening CZA. This was put forth before the audience and the structure of the vision plan exercise and its deliverables were discussed in brief.

This was followed by 4 presentations by zoos: Dr. R. K. Sahu, Director, Kamla Nehru Zoological Garden, Kankaria Gujarat spoke about the projects and plans for the Kamla Nehru Zoological Garden; Ms. Pramila Rajan, Director Madras Crocodile Bank Trust, Tamil Nadu spoke about the specialised reptile zoo and aspects specific to its management with emphasis to create a people connect due to the inherent and often misplaced fear of reptiles; Dr. Sanjeet Kumar (IFS), Dy. Director Nandankanan Biological Park, Bhubaneswar, Odisha presented the case study of the Nandankanan Biological Park, and Dr Bhaskar Choudhury, Head Veterinarian, Wildlife trust of India & Centre for Wildlife Rehabilitation and Conservation, Assam spoke about the unique, and important role played by the rescue and rehabilitation centres.

Some of the issues flagged in the session included:

- Zoos should be a priority sector of the Central Government
- Challenges like lack of suitable manpower,
- Lack of expertise in infrastructure designing and media management.
- Extant policies related to captive breeding of animals.
- Zoos to be brought under “silent zone”
- Consideration to the use of animals for demonstration & education outreach.
- Management of old and new exhibits
- Wildlife health and disease management at zoo levels and progressing to regional level.
- Quarantine facility norms may be revisited
- Laboratory support at local level for zoos



Participant presentations from Session I on Policy level mitigation for challenges in zoo management including administration, animal health care and welfare

Dr Dhananjai Mohan, IFS, Director, Wildlife Institute of India delivered a special talk on “Meaningful contribution of zoos to wildlife conservation”. He emphasised the role of zoos as open classrooms and centres for learning and research. The contributions to species conservation and linkages between ex-situ and in-situ programs was highlighted. Collaborations with scientific institutions would help in the development of the inhouse and national programs that the zoos undertake. He emphasised the need for zoos to look at global policies and incorporate approaches like the one plan approach for programs in zoos in India.

Concluding remarks were presented by Shri P. C. Tyagi, session co-chair, summarising the session and emphasised the need of eco-friendly concepts in zoo design. He commended the zoos for being repositories for pure genetic stock and appreciated the collaborations attempted by NGO’s and state governments.

Shri Soumitra Dasgupta, Session chair, mentioned that the zoos should consider becoming more financially independent with the formation of societies and implementation of programs with CSR funding. Zoos must focus on visitor experience and make conservation awareness a focus with innovation being the need of the hour. He mentioned that there is support for good zoos and their activities and zoos are important parts of any conservation planning exercise.

Session takeaways

- 1) Zoo to consider developmental activities in terms of infrastructural upgradation, incorporating environmental sustainability measures.
- 2) Zoos should consider becoming more financially independent with the formation of societies and implementation of programs with CSR funding.
- 3) Zoos may consider exploring schemes announced by the Central Government to garner support for programs and conservation initiatives.
- 4) The number of rescued animals in zoos is increasing possibly because of increasing conflict. The number of such animals is increasing in zoos, and due to the lack of space management of such animals is becoming difficult. Therefore, a defined mechanism for placement and management of rescued animals in accordance with extant statutory provisions should be explored.
- 5) It is often the case that zoos that are situated in urban areas and are often under severe pressure from increased ambient noise levels. It should be explored if areas where zoos are situated could be declared as 'silent zones'.



Special talk by Dr Dhananjai Mohan, Director Wildlife Institute of India, Dehradun



Shri P C Tyagi, IFS (Retd) co- chairing session I on Policy level mitigation for challenges in zoo management including administration, animal health care and welfare



Summary by the Chair & Co-Chair of the Session I on Policy level mitigation for challenges in zoo management including administration, animal health care and welfare

Session II

Capacity Building in zoos- Vision for capacity building related to outreach, veterinary medicine for personnel working in zoos

Today's conservation challenges are greater than ever before. Thousands of species all over the world face extinction, and many fragile ecosystems are in danger. Every day, we all learn more about concepts like one health that address worldwide health and conservation issues, emerging and re-emerging diseases, animal welfare standards. There are many definitions of capacity development. Participants from diverse fields – human health, wildlife health, veterinarians, etc. – have varying perspectives on capacity development. Interdisciplinary approaches towards holistic capacity building is the need of the hour.

The session had talks by Dr R. K. Hirpara, Superintendent, Rajkot Municipal Zoo, Rajkot outlining activities aimed at visitor engagement through interactive information panels, Dr Dipak Sawant, Curator, Balasaheb Thackrey Gorewada International Zoo, Nagpur discussed the project plans and practices by the new and upcoming facility, including their practices for animal enrichment incorporating the ecological features of the land.

Mr Kartick Satyanarayan, CEO and Co-founder, Wildlife-SOS delivered a talk on “Rescue and rehabilitation for the future”. He spoke about the beginnings of Wildlife SOS and their continued work with the communities to ensure the success of their rescue and rehabilitation efforts for the dancing bears (Sloth Bear - *Melursus ursinus*). He also spoke about the continued engagement with capacity building for the forest department personnel. Wildlife SOS currently manages 13 rescue centres across the country, and he emphasised the need for more such facilities in his talk.

Concluding remarks were presented by Dr Sindura Ganapati, O/o Principal Scientific Advisor, Government of India, session co-chair, encouraging zoos to continue their engagement with the community at large and focus on good data management within the facilities. He mentioned that this data would often be useful to influence management practices and future programs.

Shri R N Mehrotra, IFS (retd.) session chair, suggested that Wildlife Institute of India in collaboration with the Central Zoo Authority may chalk out a program for the capacity building for zookeepers.



Participant presentations from Session II on capacity building in zoos



Special talk by Mr Kartick Satyanarayanan, Co-Founder & CEO Wildlife SOS



Concluding remarks by session co-chair, Dr Sindura Ganapati, O/o Principal Scientific Advisor, Government of India



Summary of Session II on Capacity Building in zoos by session Chair, Shri R N Mehrotra, IFS (Retd.)

Session Takeaways

- 1) Incorporate programs and capacity building initiatives for wildlife health and disease management at zoo level and progressing to regional level.
- 2) The zoos may work together and form a network for Laboratory support at local level or regionally, especially with the universities and veterinary colleges.
- 3) Zoos should focus on understanding emerging infectious diseases (e.g. Chytrid fungus) and put in place plans for surveillance and management in accordance with their collection plans.
- 4) The zoo fraternity should aim to create a cadre is veterinarians trained in aspects of wildlife management. To this end, regular training and refresher courses should be undertaken to ensure continued engagement and creation of optimal number of trained veterinary professionals.
- 5) Initiate co-operation at the local, national, and international level to provide a network of support and share good practice and further co-operate in developing educational programmes.

Session III

Linking in-situ and ex-situ conservation efforts including Bio-security planning for Endangered species

There is an increasing need for a “one plan approach” for conservation strategies that integrate in-situ and ex-situ management processes. Zoos contribute directly to threatened species conservation through paradigms, such as reintroduction, head-starting, supplementation, or rescue/rehabilitation/release. This in-situ-ex-situ integration necessitates collaboration at all levels of conservation action including planning, implementation, monitoring and assessment to drive adaptive management processes.

Dr Vibhu Prakash, Principal Scientist, Vulture Conservation breeding Centre, Pinjore, Haryana spoke about the vulture decline and the causes like NSAID and their spurious use in the market. The ongoing conservation breeding of the three Gyps species embodies establishing strong in-situ and ex-situ linkages integrating ex-situ efforts at the centre with double clutching, artificial incubation, standardised husbandry practices for breeding and the on-groundwork like identification of vulture safe zones, strong ties with the stakeholders like AH department and Drug Control Authority of India and regular monitoring surveys.

Sh. Basavaraj Holeyachi, IFS, Director, Padmaja Naidu Himalayan Zoological Park, Darjeeling, West Bengal spoke about the unique and successful Red Panda (*Ailurus fulgens ssp. fulgens*) breeding program and their successful re-introduction to the wild including the on-going monitoring programs. He also spoke about the ongoing programs for the Snow Leopard (*Panthera uncia*), Himalayan Goral (*Naemorhedus goral*) and Himalayan Newt (*Tylototriton himalayanus*).

Dr Abhishek Kumar, Director, Sakkarbaug Zoo, Junagadh spoke about the facilities in the zoo and the conservation outreach related to Asiatic Lion (*Panthera leo ssp. persica*), vultures (*Gyps sp.*), Asian Wild Ass (*Equus hemionus ssp. khur*) and Indian Wolf (*Canis lupus ssp. pallipes*) taken up by the zoo, and the programs for breeding using artificial reproduction techniques in Red Junglefowl (*Gallus gallus*).

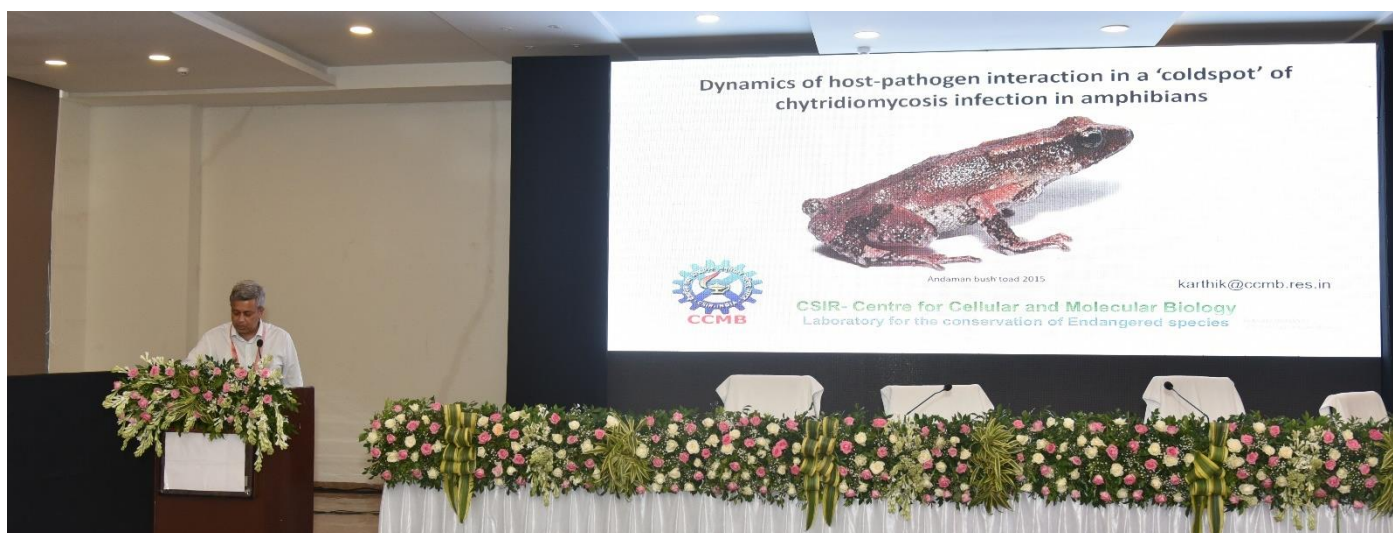
Dr Karthikeyan Vasudevan, Senior Principal Scientist (LaCONES)-Centre for Cellular and Molecular Biology presented a talk on the fungus *Batrachochytridium dendrobatidis* seen in Amphibians. He mentioned that this fungus has caused devastating declines in amphibian species worldwide and has been noted in India as well, though the mortality and morbidity has been low. He described a case study from CCMB/ LaCONES for the detection and monitoring of frogs and tracking of the disease in the Northern Western Ghats and its relevance to amphibian collection in zoos.



Participant presentations from Session III Linking in-situ and ex-situ conservation efforts including Bio-security planning for Endangered species

Concluding remarks were presented by Dr Abhijit Pawde, Principal Scientist & In-charge, Centre for Wildlife, ICAR-Indian Veterinary Research Institute, Izatnagar, Session co-chair. He emphasised the need for stringent management practices and disease monitoring in zoo animals being acquisitioned by the zoo either through animal exchange or rescue. He also touched upon the need for surveillance of emerging disease and collaborations for the same.

Shri Jagdish Chander (IFS), PCCF & Chief Wildlife Warden, Haryana, Session chair emphasised the states' role in supporting in-situ and ex-situ linkages for conservation breeding programs for threatened species, such as one ongoing for Vulture in Pinjore, Haryana. He encouraged zoos to take up species conservation & outreach initiatives.



Special talk by Dr Karthikeyan Vasudevan, Senior Principal Scientist (LaCONES)-Centre for Cellular and Molecular Biology



Summary by the Chair & Co-Chair of the Session III on Linking in-situ and ex-situ conservation efforts including Bio-security planning for Endangered species

Session Takeaways

- 1) The value of zoos in contributing to in-situ conservation and eventually species recovery should be given additional emphasis. There are several species e.g. Red Panda, Snow Leopard, Vultures etc., which are being bred as part of ex-situ conservation programs and have a great potential to contribute to species conservation in-situ.
- 2) Zoos also have great potential to serve as centres to take up novel conservation research and additionally develop programs with broader scope related to in-situ conservation initiatives.
- 3) Zoos to further adopt the one-plan approach for conservation strategies that integrate in-situ and ex-situ management processes. Incorporate programs and capacity building initiatives for wildlife health and disease management at zoo level and at regional level.

October 11, 2021- DAY 2

Day 2 of the conference commenced with a visit to the Sardar Patel Zoological Park, Kevadia, Gujarat. This was followed by the continuation of the technical sessions.

Session IV

Technology, design, and innovation

The ability to generate innovation plays an increasingly important role in addressing several issues, from modern design to use of technology for animal care, welfare and even data management. In a way that also ensures all round development of the institution. Multidisciplinary innovations, and enhanced competencies enable contribution to innovation activities and the development of systems in which the environment and social issues are taken into consideration.

Dr Ajit Kulkarni, IFS Executive Director, Sri Chamarajendra Zoological Gardens, Mysuru spoke about the developments in the zoo from the online ticketing system, modern website and mobile app for a better visitor experience, improved security, recycling initiatives for inorganic waste generated in the zoo to sustainability practices like vermicomposting or organic waste, rainwater harvesting etc.

This was followed by a talk by Dr Uttam Yadav, Director, Kamla Nehru Prani Sangrahalaya Zoo, Indore. During his talk titled “Digitalisation in Wildlife”, he spoke about the digital program implemented by the zoo for data recording and monitoring of the animals.

Dr Pratyush Patankar, Curator, Sayajibaug Zoo, Vadodara detailed the activities of the zoo with an overview of future activities.

Dr R K Singh, Director, Nawab Wajid Ali Shah Zoological Garden Lucknow presented the activities and innovations implemented at the zoo, including the use of signages in Braille, simple rodent proofing methods in avian enclosures. He also mentioned the program of universal accessibility implemented by the zoo and the recent WAZA membership that had been received. Final talk of the session was presented by Dr Brij Kishor Gupta, Director, Greens Zoological Rescue Rehabilitation Centre, Gujarat who shared the process of planning and incorporation of technology for animal management at the said zoo. He spoke about the modern enclosure designs and incorporation of technology/software like facial recognition etc. to aid in the animal management, care and animal enrichment and welfare.



Participant presentations from Session IV on Technology, design, and innovation



Shri Bhupender Yadav, Hon'ble Minister for Environment, Forest and Climate Change, Government of India during his visit to the Sardar Patel Zoological Park,



Shri Bhupender Yadav, Hon'ble Minister for Environment, Forest and Climate Change, Government of India receiving a souvenir from Mr Abhilash Khandekar, Senior Journalist, Bhopal



Summary of Session IV on Technology, Design and Innovation by the Chair and Co-Chair

Session takeaways

- 1) Zoos should also focus on vastly improving visitor experience by means of innovation to successfully convey the conservation message.
- 2) There is also a great scope for improvement and innovation in terms of exhibit designs currently employed by zoos. This should be improved by promoting collaboration and inter disciplinary approaches.
- 3) Evaluating the quality of technological innovations and their use by non-human and human counterparts is a critical to enhance animal welfare and visitor experience at zoological parks.
- 4) Multidisciplinary Innovation can play an increasingly important role in addressing several issues, from modern design to use of technology for animal care, welfare and even data management.

Session V:

Value of Conservation outreach in species conservation and implications for curbing wildlife crime and trade

Wildlife trade issues were placed on the agenda for discussion among zoo professionals, where they matter most. From running public awareness events to organising outreach programmes. All with a view to informing key (potential) players within wildlife trade chains about the importance of legality and sustainability.

The session was opened by remarks from the Session Chair, Ms Tilotama Varma, IPS – Additional Director, Wildlife Crime Control Bureau. She presented an overview about the Wildlife Crime Control Bureau and their activities towards mitigating wildlife trade not only in the field but also for outreach among the masses. She remarked that zoos can spread the message to the visitors and due to their ability to assist with rescue operations form important stakeholders in the mitigation of wildlife trade. Her opening remarks were followed by a presentation on the species most encountered in trade to familiarise the audience with the challenges faced in this sphere.

This was followed by three presentations: Dr Komal Powar, Senior Veterinary Officer, Veermata Jijabai Bhosale Udyan & Zoo, Mumbai, Smt. Karunapriya, IFS, APCCF and Director, Arignar Anna Zoological Park, Vandalur and Mrs. Vibha N. Goswami, DD (R & D) Indroda Nature Park, GEER foundation, Gujarat.

These presentations focused on the education outreach and special awareness programs undertaken by the respective zoos to inform people about wildlife and the threats and challenges to species and habitats. Zoos had taken up innovative measures to conduct these programs such as virtual webinars, onsite interpretation programs, including quizzes and art & craft exercises.

The session concluded with remarks from Dr Amit Malik, IFS, Inspector General of Forests, NTCA, session co-chair who emphasised the importance of collaborative action and encouraged zoos and wildlife professionals to do their bit in curbing this growing challenge.

Session Chair, Ms Tilotama Varma acknowledged the zoos and their work and emphasised the need for all to work together and provide support to successfully address wildlife trade challenges for species conservation.



Participant presentations from Session V on Value of Conservation outreach in species conservation and implications for curbing wildlife crime and trade



Summary of Session V on Value of Conservation outreach in species conservation and implications for curbing wildlife crime and trade by the session Chair and Co-Chair

Session takeaways

- 1) The role of zoos in taking up conservation education needs to be strengthened. The species (native and non-native) have great conservation education value and the potential of the same needs to be tapped to aware people about the importance of wildlife conservation.
- 2) Working with organisations involved in curbing and mitigating wildlife trade so as to provide assistance where needed
- 3) Use the zoo education facilities to inform visitors about trade and the implication on wildlife

Session VI

Sankrakshan ka Sankalp- Ek Jan Bhagidari (A Conservation Collective)

Zoos are living institutions, living classrooms and could serve as a platform for educating people about our eco-theological heritage, the protection of habitat, ecosystems, and forests, and maintaining life supporting processes of nature. Creating awareness about nature and natural resources and supporting clear understanding of the inter-connectedness of life on earth is the best way to equip today's youth with the knowledge and leadership skills to meet tomorrow's environmental challenges and ensure a healthier planet. Sankrakshan Ka Sankalp- Ek Jan Bhagidari aims at providing a platform to celebrate the special place of wild plants and animals in their many varied and beautiful forms. Furthermore, it offers the opportunity to appreciate the interactions between people and animals around us and improve scientific vigour in our interactions with inculcation of the concept of citizen science.

Smt. Vanashree Vipin Singh, IFS, Executive Director, Bannerghatta Biological Park Bengaluru presented the community education and outreach initiatives at the said zoo. The strong ties with the community and their local programs *Chinnara Mrugalaya Darshana* launched in November 2017 have reached over 4000 government school students from forest fringes. The Zoo club initiative has also been well received. These ties have aided in the successful adoption programs with 1,965 adopters and a contribution Rs. 1.6 crore.

Dr Bipul Chakravarty, Director, Tata Steel Zoological Park, Jamshedpur spoke about the zoo run by the Tata Steel Foundation as a case study for partnership between corporate and government sectors. The education outreach initiatives and the involvement of the local community was showcased in the presentation.

Shri A K Jain, IFS, Curator, Van Vihar National Park Zoo, Bhopal presented the outreach activities for the visitors. The unique initiatives including rallies and competitions for the environmental days were shared with the audience.

Mr Vivan Karani, CEO, Greens Zoological Rescue and Rehabilitation Centre, Jamnagar delivered a talk on the “Corporate responsibility for Animal Welfare” and shared the ambitious plan of the Greens Zoological Rescue and Rehabilitation Centre and the ongoing work for the care and welfare of the animals at the facility.



Participant presentations from Session VI *Sankrakshan ka Sankalp- Ek Jan Bhagidari* (A Conservation Collective)



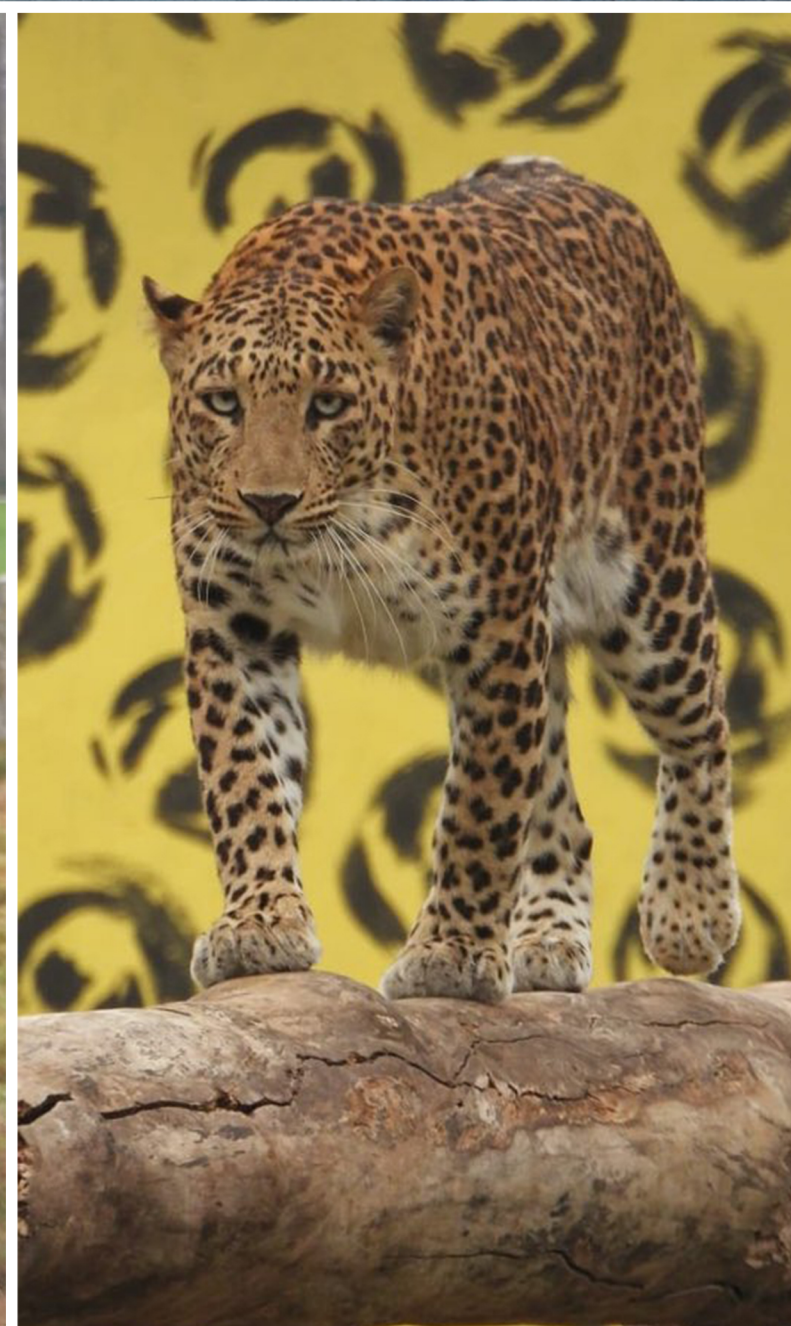
Special talk by Mr Vivan Karani, CEO, Greens Zoological Rescue and Rehabilitation Centre, Jamnagar, Gujarat

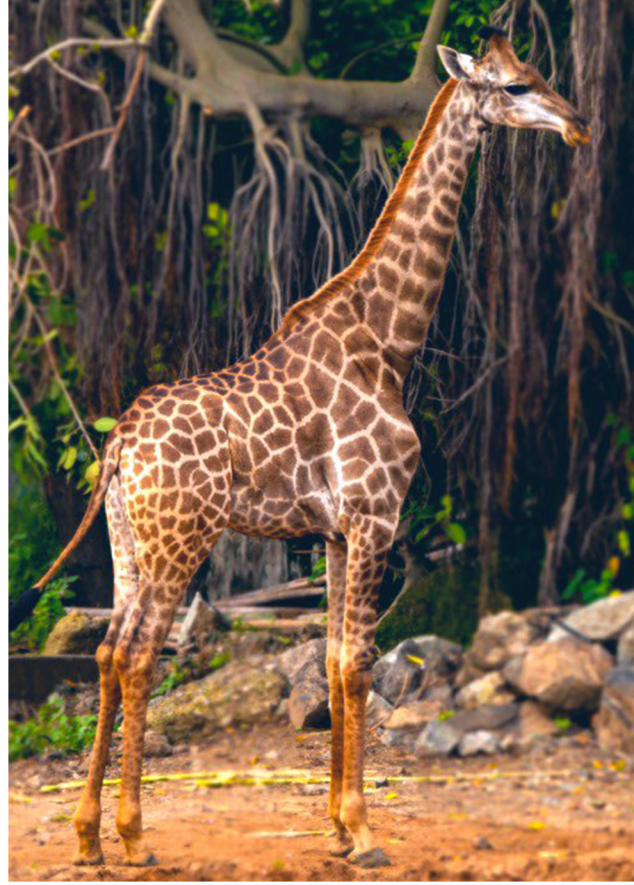


Summary of Session VI on *Sankrakshan ka Sankalp- Ek Jan Bhagidari* (A Conservation Collective) by the session Chair

Session takeaways

- 1) Zoos are living institutions, living classrooms and could serve as a platform for educating people about, the protection of habitat, ecosystems, and forests, and maintaining life supporting processes of nature.
- 2) Zoos can create awareness about nature and natural resources and support clear understanding of the inter-connectedness of life on earth.
- 3) Zoos can provide a platform to improve scientific vigor and inculcate the concept of citizen science.
- 4) Zoos must explore support from industries through CSR funding and development through PPP mode.







Shri Bhupender Yadav, Hon'ble Minister, Environment, Forest & Climate Change, Government of India, Shri Kiritsinh Rana, Hon'ble Minister (Forest and Environment), Government of Gujarat attending the final session of the conference.



Shri Bhupender Yadav, Hon'ble Minister, Environment, Forest & Climate Change, Government of India, with the participants while gearing up for the valedictory.

Valedictory

The Valedictory was graced by Shri Bhupender Yadav, Hon'ble Minister, Environment, Forest & Climate Change, Government of India, Shri Kiritsinh Rana, Hon'ble Minister (Forest and Environment), Government of Gujarat and other officials of the Central and State Government.



Online address by Dr. Sudha Murty, Chairperson, Infosys Foundation, and felicitation during the Valedictory.

Dr. Sudha Murty, Chairperson, Infosys Foundation was felicitated for her unbridled support to zoos during the pandemic. She delivered an inspiring speech on the value of zoological institutions and the role they play in encouraging empathy and inspiring conservation action.

Shri Bhupendra Yadav, in his keynote, congratulated everyone for their efforts for species conservation. The key highlights of his valedictory speech were:

- 1) Drawing a parallel with the journey of Azadi, he said that the journey of conservation should accord importance for all round protection of wildlife, wild habitats, and the natural resources.
- 2) He emphasised on the importance of conservation awareness and its value in conflict mitigation strategies.
- 3) He encouraged zoos to become financially independent and explore avenues for CSR and public private partnerships and focus on native birds and animals as priority species for conservation.
- 4) He proposed an inclusive way forward with collaboration between zoos and Nagar Vans.
- 5) Incorporating the suggestions received from zoo officials, he mentioned that a short-term and long-term plan shall be prepared for improvement in zoos.
- 6) He mentioned that similar Zoo Directors/Veterinarians workshops and conferences shall be planned regularly.
- 7) He stated that conservation priority should be accorded to faunal species endemic or regionally occurring in India.
- 8) He emphasised on the important role veterinarians play in zoo management and remarked that regular wildlife trainings for veterinary professionals in wildlife management shall be held.

During the valedictory, a movie for outreach and awareness by the Wildlife Crime Control Bureau- Live in harmony with nature, stop illegal trade in wildlife was unveiled, and three publications of the Central Zoo Authority-

- 1) Vision Plan for Indian zoos and strengthening of Central Zoo Authority (2021-2031),
- 2) WASH Manual for Zoos prepared in collaboration with UNICEF, India, and
- 3) Azadi Ka Amrit Mahotsav – Volume 1 were released.



Movie for outreach and awareness by the Wildlife Crime Control Bureau- Live in harmony with nature, stop illegal trade in wildlife was unveiled.



Release Of Vision Plan for Indian Zoos and Strengthening of Central Zoo Authority (2021-2031), a CZA publication.



Release of WASH Manual for Zoos prepared in collaboration with UNICEF, India.



Release of Azadi Ka Amrit Mahotsav – Volume 1.



Animal Keeper- Smt Laxhi Devi, Bhagwan Birsa Biological Park, Ranchi, receiving her CZA - Prani Mitra award 2021.



Biologist/Educationist- Shri Harpal Singh, M. C. Zoological Park, Chhatbir, receiving his CZA - Prani Mitra award 2021.



Veterinarian- Dr S Ilayaraja, Agra Bear Rescue Facility, receiving his CZA - Prani Mitra award 2021.



Director/Curator- Dr Vibhu Prakash, Director, Vulture Conservation and Breeding Centre, Pinjore, receiving his CZA - Prani Mitra award 2021.

This was followed by the announcement of CZA Prani Mitra Awards 2021. The awards are aimed at encouraging zoo professionals in India to continue their selfless service to the captive animals and to motivate them to maintain best practices and reach exemplary standards of animal care and welfare.

The winners of the CZA-Prani Mitra Award 2021 were:

- Animal Keeper- Smt Lakhi Devi, Bhagwan Birsa Biological Park, Ranchi

Mrs Lakhi Devi, Animal Keeper at Bhagwan Birsa Biological Park, Ranchi joined as a gardener in the zoo in 2001. Her interest and commitment towards caretaking of birds was recognized by the zoo management and she was shifted from gardening to the aviary section in 2006. Her commitment towards bird care resulted in the successful breeding of Peafowls at the facility. Mrs Lakhi Devi is being recognized for being sincere, punctual, and motivated, contributing towards outstanding animal care and welfare.

- Biologist/Educationist- Shri Harpal Singh, M. C. Zoological Park, Chhatbir

Mr Harpal Singh, Forester, is working at M.C. Zoological Park, Chhatbir zoo since 1997. He is executing the animal's upkeep and other husbandry related supervisory duties in the animal management wing of Chhatbir zoo. He has been currently deputed as the in-charge of Range Officer Animal Management Range since July 2017 and has also been holding the additional charge of the zoo Education officer since 2015. Mr Harpal Singh is being recognized for his outstanding work for the betterment of wildlife conservation, awareness, and zoo education.

- Veterinarian- Dr S Ilayaraja, Agra Bear Rescue Facility

Dr Ilayaraja's dedication and commitment towards animal welfare stemmed from a very young age. He is presently the Vet in charge of the Agra Bear Rescue Facility, where over 200 sloth bears are kept under their care, rescued from the age-old tradition of "dancing bears", anti-poaching operations and orphaned bear cubs that were hand-reared at their facility.

Additionally, he also heads the coordination with various State Forest Departments in the country for devising methods in handling the important area of human-animal conflict mitigation, especially with wild sloth bears.

- Director/Curator- Dr Vibhu Prakash, Vulture Conservation and Breeding Centre, Pinjore

Dr Vibhu Prakash has been spearheading vulture conservation in India for the past three decades. He has played a key role in securing continued support of international funding agencies and government agencies in the conservation of vultures.

Dr Prakash has also worked extensively on in situ conservation of vultures.

Dr Vibhu Prakash has dedicated his entire life to vulture conservation and is systematically working to achieve the main objective of the programme of saving the vultures from extinction. He has the following awards to his credit in recognition of his work carried out on vultures:

- Marsh Award for Bird Conservation, 2003
- Award for Wildlife Conservation and protection by Haryana Government, 200g.
- Fellow, Zoological Society of London, U.K., 2009.
- RBS -Save the Species Award 2016

The vote of thanks was delivered by Shri Soumitra Dasgupta, IFS, Additional Director General (Wildlife), Ministry of Environment Forest and Climate Change, Government of India.



Group picture after the Inaugural with the Hon'ble Ministers, dignitaries, and the participants of the National Conference for Zoo Directors and Veterinarians-2021.

The National Conference for zoo directors and Veterinarians was a resounding success due to the attendance and active participation by more than 100 participants- zoo directors, zoo veterinarians, prominent dignitaries, and experts from various fields of wildlife conservation and wildlife health.

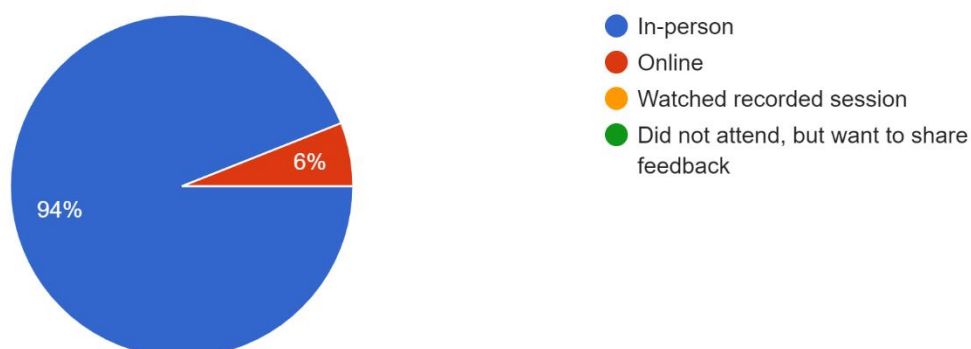
In-person and online feedback were sought from participants. A summary of the feedback received is placed below. Preliminary suggestions received from the participants are placed at Annexure 2. As per relevance, all the suggestions received from participants will be compiled and will be suitably incorporated in planning similar events in future.



Dignitaries on the dais during the Valedictory

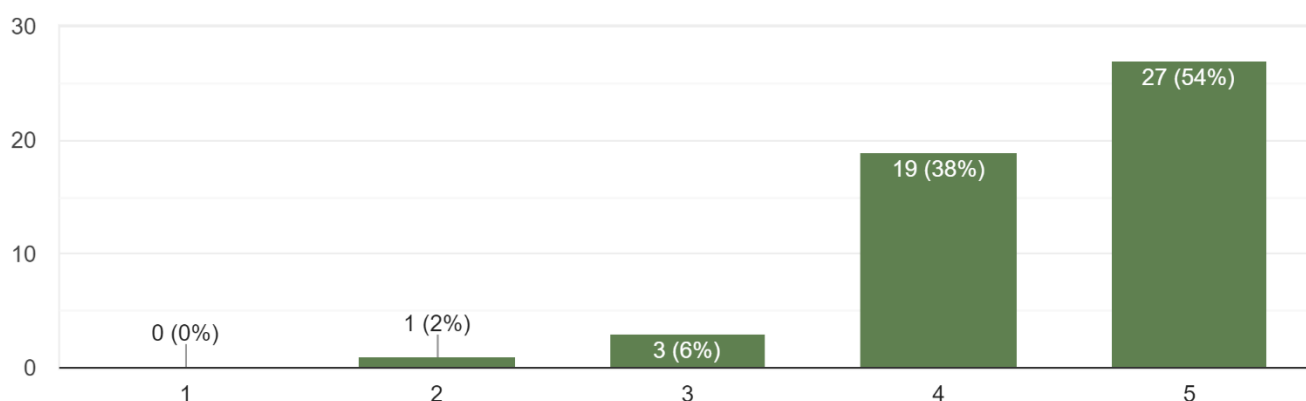
Mode of attendance

50 responses



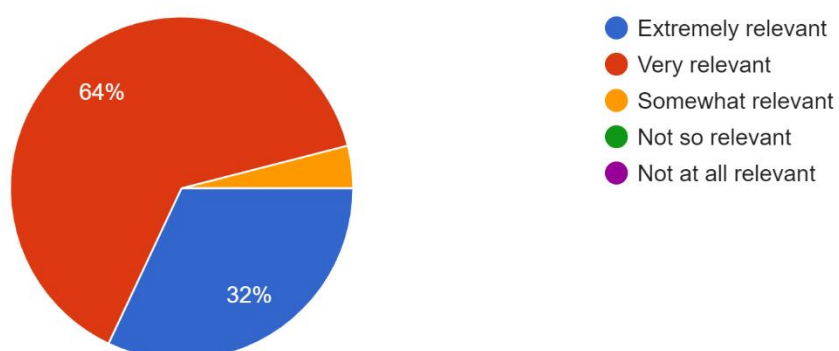
Overall, how would you rate the overall technical quality of the event?

50 responses



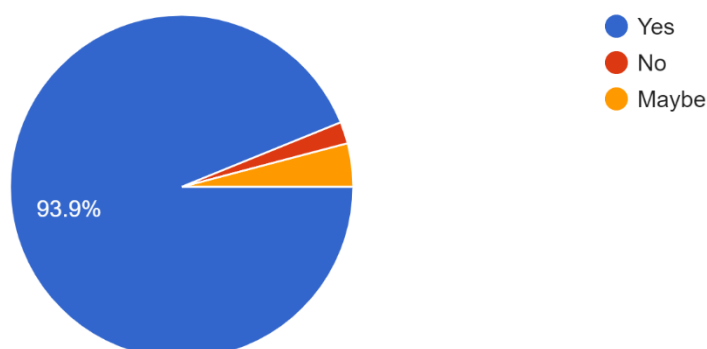
How relevant was the content presented at the event?

50 responses

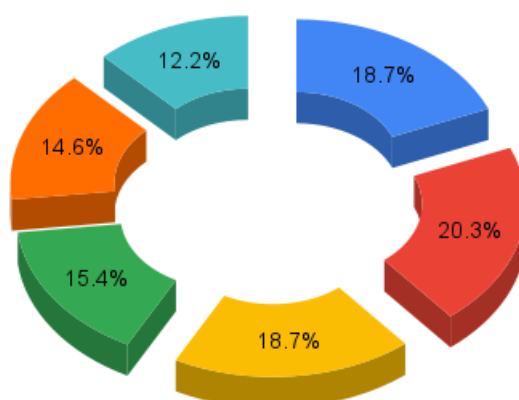


Did the conference provide adequate opportunities for networking with fellow zoo professionals?

49 responses



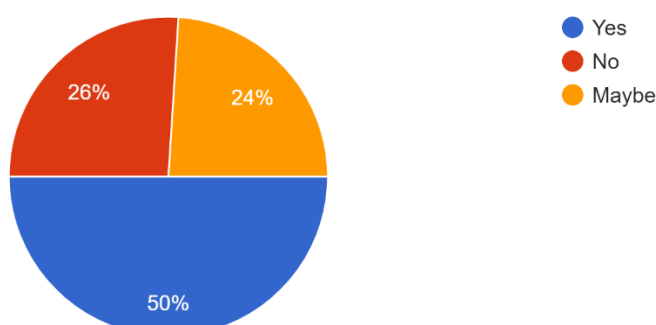
Most useful and/or interesting topic of the training.



- Policy level mitigation for challenges in zoo management including administration, animal health care and welfare
- Capacity Building in zoos- Vision for capacity building related to outreach, veterinary medicine for personnel working in zoos
- Linking in-situ and ex-situ conservation efforts including Bio-security planning for Endangered species
- Technology, design and innovation
- Value of Conservation outreach in species conservation and implications for curbing wildlife crime and trade
- 1 more

Did the conference provide adequate time and platform to discuss current issues relating to zoo management?

50 responses



Annexure 1

Agenda - National Conference for Zoo Directors and Veterinarians

NATIONAL CONFERENCE FOR ZOO DIRECTORS AND VETERINARIANS	
Venue: SARDAR PATEL ZOOLOGICAL PARK, Kevadia, Gujarat	
10 th October 2021 (Sunday)	
09:00	Registration
09:45	Arrival of dignitaries and walk-through Stalls / Exhibition
10:00 - 11:30	Inaugural Session
	Welcome Address by Dr. Satya Prakash Yadav, IFS, ADG (PT), MS (NTCA) & Member Secretary, Central Zoo Authority.
	Remarks by Shri Soumitra Dasgupta, IFS, Addl. Director General (Wildlife), Ministry of Environment Forest and Climate Change, Government of India.
	Launch: ZOO-MIS, CZA Web Application
	Release: Ex-situ Update – A Quarterly Newsletter of CZA
	Address by Shri Jagdish Vishwakarma (Panchal), Hon'ble Minister of State (Forest & Environment), Government of Gujarat.
	Keynote address by Shri Ashwini Kumar Choubey, Hon'ble Minister of State for Environment, Forest & Climate Change, Government of India.
	Vote of Thanks: Shri Shyamal Tikadar, IFS, PCCF & Chief Wildlife Warden, Gujarat
12:00- 13:00	Session I: Policy level mitigation for challenges in zoo management including administration, animal health care and welfare
	Chair: Shri Soumitra Dasgupta, IFS, ADG Wildlife MoEFCC
	Co-Chair: Shri P. C. Tyagi, IFS (Retd)
	<u>Presentations</u>
	1) Dr. Sonali Ghosh, IFS DIG (Hq.), CZA & Neelakshi Rathore, Representative, Ernst & Young - Overview of Central Zoo Authority & Vision plan
	2) Dr. R. K. Sahu, Director - Kamla Nehru Zoological Garden, Gujarat
	3) Ms. Pramila Rajan, Director - Madras Crocodile Bank Trust, Tamil Nadu
	4) Dr. Sanjeet Kumar, IFS, Dy. Director - Nandankanan Biological Park, Bhubaneswar, Odisha
	5) Dr Bhaskar Choudhury, Head Veterinarian - Wildlife trust of India & Centre for Wildlife Rehabilitation and Conservation, Assam
	6) Special Talk: Dr. Dhananjai Mohan, IFS, Director, Wildlife Institute of India, Dehradun - Meaningful contribution of zoos to wildlife conservation
	Concluding remarks by Chair and Co-chair
14:00- 15:00	Session II: Capacity Building in zoos- Vision for capacity building related to outreach, veterinary medicine for personnel working in zoos
	Chair: Shri R N Mehrotra, IFS (retd.)
	Co-Chair: Dr Sindura Ganapati, O/o Principal Scientific Advisor, Government of India
	<u>Presentations</u>
	1) Dr. R. K. Hirpara, Superintendent, Rajkot Municipal Zoo, Gujarat
	2) Sh Dipak Sawant, Curator, Balasaheb Thackeray Gorewada International Zoological Park, Maharashtra

	3) Special Talk – Mr Kartick Satyanarayan, CEO and Co-founder, Wildlife-SOS: “Rescue and rehabilitation for the future”
	Concluding remarks by Chair and Co-chair
15:30-16:30	Session III: Linking in-situ and ex-situ conservation efforts including Bio-security planning for Endangered species
	Chair: Shri Jagdish Chander, IFS, PCCF & Chief Wildlife Warden, Haryana, Panchkula
	Co-Chair: Dr Abhijit Pawde, Principal Scientist & In-charge, Centre for Wildlife, ICAR-Indian Veterinary Research Institute, Izatnagar
	<u>Presentations</u>
	1) Dr Vibhu Prakash, Principal Scientist, Vulture Conservation breeding Centre, Pinjore, Haryana
	2) Sh. Basavaraj Holeyachi, IFS, Director, Padmaja Naidu Himalayan Zoological Park, Darjeeling, West Bengal
	3) Dr Abhishek Kumar, Sakkarbaug Zoo, Junagadh
	4) Special Talk- Dr Karthikeyan Vasudevan, Senior Principal Scientist (LaCONES)-Centre for Cellular and Molecular Biology -Rise of the fungus <i>Batrachochytricum dendrobatides</i>
	Concluding remarks by Chair and Co-chair
16:45 – 20:15	Site Visit to Statue of Unity and Glow Garden
20:30	Gala Conference Dinner
11 th October 2021 (Monday)	
07:30-09:30	Visit to Sardar Patel Zoological Park, Kevadia, Gujarat
10:30-11:30	Session IV: Technology, design and innovation
	Chair: Shri Upamanya Basu, Joint Secretary, Dept Of Animal Husbandry, Dairying and Fisheries Govt of India
	Co-Chair: Shri Abhilash Khandekar, Senior Journalist & Member CZA
	<u>Presentations</u>
	1) Dr Ajit Kulkarni, IFS, Executive Director, Sri Chamarajendra Zoological Gardens, Mysuru
	2) Dr Uttam Yadav, Director, Kamla Nehru Prani Sanghralaya Zoo, Indore
	3) Dr Pratyush Patankar, Curator, Sayajibaug Zoo, Vadodara, Gujarat
	4) Dr Mehro, IFS, Director, Nawab Wajid Ali Shah Zoological garden, Lucknow
	5) Dr Brij Kishore Gupta, Director, Greens Zoological Rescue & Rehabilitation Centre
	6) Discussion- Need for specialisation and way forward including in aspects like Rescue, Animal capture and restrain
	Concluding remarks by Chair and Co-chair
11:45-13:00	Session V: Value of Conservation outreach in species conservation and implications for curbing wildlife crime and trade
	Chair: Ms Tilotama Varma, IPS - Additional Director, Wildlife Crime Control Bureau
	Co- Chair: Dr Amit Mallik, IFS Inspector General of Forests, NTCA
	<u>Presentations</u>
	1) Dr Komal Powar, Sr Veterinary Officer, Veermata Jijabai Bhosale Udyan & Zoo, Mumbai
	2) Tmt. Karunapriya, IFS, APCCF and Director, Arignar Anna Zoological Park, Vandalur
	3) Mrs. Vibha N. Goswami, DD (R & D), Indroda Nature Park, GEER foundation
	Concluding remarks by Chair and Co-chair

14:00-15:30	Session VI <i>Sankrakshan ka Sankalp- Ek Jan Bhagidari (A Conservation Collective)</i>
	Chair: Shri RK Singh, IFS (retd) & Member Central Zoo Authority
	Co-Chair: Mr Sujoy Majumdar, WASH Specialist UNICEF
	<u>Presentations</u>
	1) Smt. Vanashree Vipin Singh, IFS, Executive Director, Bannerghatta Biological Park Bengaluru
	2) Dr Bipul Chakravarty, Director, Tata Steel Zoological Park, Jamshedpur
	3) Sh. A K Jain, IFS, Curator, Van Vihar National Park Zoo, Bhopal
	4) Special Talk – Mr Vivaan Karani, CEO, Greens Zoological Rescue and Rehabilitation Centre, Jamnagar ' <i>Corporate responsibility for Animal Welfare</i> '
16:00-16:30	Concluding remarks by Chair and Co-chair
	Valedictory Session
	Welcome Address: Dr. Satya Prakash Yadav, IFS, Additional Director General (PT), Member Secretary (NTCA) & Member Secretary, Central Zoo Authority
	RELEASES:
	1) Movie- Live in harmony with nature, stop illegal trade in wildlife (WCCB)
	2) Vision Plan (2021-2031) for Indian zoos and strengthening of Central Zoo Authority.
	3) WASH Manual for Zoos
	4) Azadi Ka Amrit Mahotsav – A Compilation (Vol 1)
16:00-16:30	Announcement of CZA Prani Mitra Award 2021
	Felicitation of Mrs Sudha Murty, Chairperson Infosys Foundation for her CSR support to zoos and her compassion towards wild animals.
	Address by Shri Kiritsinh Rana, Hon'ble Minister (Forest and Environment), Government of Gujarat
	Keynote address by Shri Bhupender Yadav, Hon'ble Minister, Environment, Forest & Climate Change, Govt. of India.
	Vote of thanks: Shri Soumitra Dasgupta, IFS, Additional Director General (Wildlife), Ministry of Environment Forest and Climate Change, Government of India

Annexure 2

Suggestions received from participants

“NATIONAL CONFERENCE FOR ZOO DIRECTORS AND VETERINARIANS”
held at Sardar Patel Zoological Park, Kevadia (Gujarat) on October 10-11, 2021.

No	From	Suggestion	Remarks of the CZA Secretariat
1	Anonymous Director Zoo	Dear Sir, Very grateful to have organized such a wonderful event for the benefit of Zoo Directors & Veterinarians community eventually for the cause of wildlife conservation. Sir, on this platform I have important submission on interest to the management of rescued animals in captivity. The extant policies of CZA are not friendly. I request you to make appropriate amendments and allow zoos to use these rescued animals used for breeding & display.	<ul style="list-style-type: none"> A committee has been constituted vide OM dated July 6, 2021 to prepare policy guidelines to address aspects pertaining to placement and management of rescued animals in zoos. The said suggestion will be addressed as part of the TOR of the committee.
2	Shri Kaustubh Gowande, In-charge Rescue Centre, Wardha	Hon'ble Sir We are requesting from People for Animals Rescue Centre, Wardha (Mah). We have a request to you to please make provision to provide the grants for Rescue Centre which are approved by CZA and State Authority but there is no provision for grants from CZA to the Rescue Centre which is run by NGO.	<ul style="list-style-type: none"> Due to limited GIA as a result of COVID-19 pandemic, financial assistance to zoo is prioritized only for ongoing conservation breeding programs by the CZA. Currently all zoos accorded coordinating role for conservation breeding are being provided financial assistance. Further, committed expenditure towards maintenance & feeding of circus rescued animals from zoos are also being met.
3	Kartick/WSOS	NGOs can be given support and financial assistance by CZA. Presently, they are not given support financially by CZA and other Government agencies.	<ul style="list-style-type: none"> Due to limited GIA as a result of COVID-19 pandemic, financial assistance to zoo is prioritized only for ongoing conservation breeding programs by the CZA. Currently all zoos accorded coordinating role for conservation breeding are being provided financial assistance. Further, committed expenditure towards maintenance & feeding of circus rescued animals from zoos are also being met.
4		Memorandums of Understanding (MoUs) can be signed between CZA and NGOs like WTI, Wildlife SOS, etc. so that field	<ul style="list-style-type: none"> Zoos are encouraged and implement collaboration with NGO's at the local-level. CZA Secretariat from time-to-time engages with all stakeholders (e.g. inviting for special

No	From	Suggestion	Remarks of the CZA Secretariat
		experience can be transferred to knowledge for all zoos to benefit zoo animals.	lectures etc.) as part outreach and training programs as and when required.
5		Private-Public Partnership must be encouraged, between zoos and NGOs and between MoEFCC and NGOs so that active participation can happen on the ground.	<ul style="list-style-type: none"> The details pertaining to this has been outlined in the Vision Plan 2021-31 recently unveiled during the National Conference for Zoo Directors and Veterinarians, Kevadia, Gujarat.
6		Field workshops must also involve NGOs to collaborate and partner	<ul style="list-style-type: none"> State-holders from various domains are involved in various local and regional training programs organized by zoos and CZA as per requirement.
7		More Rescue Centres at district and State levels are needed.	<ul style="list-style-type: none"> The establishment of additional rescue centers is mandated in the National Zoo Policy 1998. CZA has encouraged the establishment of standalone rescue centres in various states. In 2020-21, permission for the establishment of 5 rescue centres was accorded by CZA in 4 states.
8		Delhi does not have a wildlife rescue centre.	<ul style="list-style-type: none"> The said matter needs to be perused by the State Government.
9		Delhi Zoo can create a rescue facility and partner with local NGO that is working for last 2 decades to assist the Delhi Forest Department in rescue and rehabilitation of wildlife in Delhi.	<ul style="list-style-type: none"> Zoos are encouraged and implement collaboration with NGO's at the local-level. The collaboration with Delhi Forest Department needs to be taken up by the State Government.
10		Animal care and treatment SOP need to be urgently created for seizure of live animals for WCCB & forest departments as many live animals are sized by enforcement agencies and these animals need to be cared for	<ul style="list-style-type: none"> This aspect requires collaboration and inputs from various departments and the same shall be taken up eventually.
11		Prani Mitra Awards given to BNHS & Wildlife SOS and frontline staff is deeply appreciated.	
12		Zoo Advisory Committee for every zoo where local stakeholders and NGOs can be a part & help with enrichment and care of animals at the zoos.	<ul style="list-style-type: none"> The constitution of Zoo Advisory committee is currently mandated, and report pertaining to the activities of Zoo Advisory Committee are sought in Annual Report submitted by the Zoo for each financial year. The constitution of this committee is overseen by the respective Zoo Director and Zoo Operator.

No	From	Suggestion	Remarks of the CZA Secretariat
13		Every zoo must have a minimum of 2-3 zoo vets as permanent staff and a team of Vets, Keepers and animal care staff.	<ul style="list-style-type: none"> The staff strength of curatorial and veterinary staff required for zoos based on their category (large, medium, small & mini) is defined in the Recognition of Zoo Rules, 2009. The sanction and recruitment of posts by respective zoo operator is as per these rules.
14	Dipak Sawant, Gorewada zoo	We request for dedicated training programme for zoo officials other than Veterinarians. Viz. Keepers, Biologists, Curators. These programmes shall be organized with defined syllabus, instead of zoo level workshops.	<ul style="list-style-type: none"> Specialized training workshops shall be planned to address this and will be taken up in due course.
15	Anonymous Director Zoo	Inclusion of exotic animal medicine course in the curriculum and the period of internship duration to be increased in zoo.	<ul style="list-style-type: none"> This aspect requires collaboration and inputs from various departments and the same may be addressed eventually by respective departments.
16		Separate cadre for Veterinarians in the Forest Department of zoos/national parks	<ul style="list-style-type: none"> This aspect requires collaboration and inputs from various departments and the same may be addressed eventually by respective departments.
17		Already existing vets from working in zoos/PA/NP to be absorbed in forest instead of sending them back to animal husbandry because it is a trained manpower, failing means wastage of trained/skilled manpower, HR, money, time, skills	<ul style="list-style-type: none"> This aspect requires collaboration and inputs from various departments and the same may be addressed eventually by respective departments.
18	Dr. R. K. Sahu, Ahmedabad Zoo	Policy changes are required for better animal collections	<ul style="list-style-type: none"> In November 2020, the permissible limit of non-native species in zoos was increased from 10 to 25%. Further, various policies and guidelines are under preparation to facilitate zoo to house less know taxa such as insects, amphibians etc.
19		Smooth exchange programme between zoos.	<ul style="list-style-type: none"> CZA has introduced digital submission of animal exchange proposals through ZOO-MIS portal. This ensures quick processing, tracking and transparency in disposal of proposals submitted to the CZA.
20		New bloodlines needed for avoiding inbreeding in zoo stock	<ul style="list-style-type: none"> The methods to avoid in-breeding are described in various extant policies, rules and guidelines of the CZA.
21	Dr. Devanand D. Sirsat, Curator- Mumbai Zoo	This kind of technical conference should happen quarterly, and need be observed by higher officials/Ministry for betterment of the nation.	<ul style="list-style-type: none"> Suitable action will be taken up in this regard.

No	From	Suggestion	Remarks of the CZA Secretariat
22	Dr. Sanjeet Kumar, Dy. Director – Nandankanan Zoo, Odisha	<p>Convening Zoo Directors' Conference is an innovative approach for cross-learning & sharing experiences. Few suggestions are –</p> <ol style="list-style-type: none"> 1. Special group-wise interactive sessions for zoo directors 2. For Vets, few parallel sessions to be organized to discuss best practices and issues 3. CZA should be more sensitive to resolve the animals exchange rescue animal procurement of exotics 	<ul style="list-style-type: none"> • Suitable action will be taken up in this regard. • CZA has introduced digital submission of animal exchange proposals through ZOO-MIS portal. This ensures quick processing, tracking and transparency in disposal of proposals submitted to the CZA.
23	Dr. Neeti Singh Chouhan, Aurangabad Zoo	<p>Leopards are found often in human vicinity. Kindly arrange an emergency ambulance with fully equipped staff for rescue. They should be safe in future, because we are encroaching their region, not them</p>	<ul style="list-style-type: none"> • The matter needs to be pursued by the respective state government. The same shall be communicated.
24	Anonymous	<p>Sir, I request to timely approval of all proposals sent by different zoos. In recent scenario, it takes approximately one-year time and this is the concern of lapse of budget. It is very sad.</p>	<ul style="list-style-type: none"> • CZA has introduced digital submission of all proposals through ZOO-MIS portal. This ensures quick processing, tracking and transparency in disposal of proposals submitted to the CZA.
25	Satyajeet Kumar Zoo Director, Patna	<p>Species-specific experience team need to be made for every species in all aspects including elephant, lion, tiger, bear etc. among them best marks awarded should give presentation.</p> <ul style="list-style-type: none"> • Foreign zoo exchange platform should be provided in this kind of conference. • There should be sessions for zoo director interactions. • There should be special sessions for zoo veterinarians. • CZA should more interactive and receptive towards any zoo concerns, • MEE evaluation reports should also be part of this conference 	<ul style="list-style-type: none"> • Suitable action will be taken up in this regard.
26	Shri Abhilash Khandekar, Member CZA,	<ul style="list-style-type: none"> • For treating the wildlife (animals, birds, amphibians), we need dedicated veterinary experts across the country. 	<ul style="list-style-type: none"> • This aspect requires collaboration and inputs from various departments and the same may

No	From	Suggestion	Remarks of the CZA Secretariat
	Member, IIFM (BOG), Member, MP State Wildlife Board	<p>Please try and see if a separate cadre of vets is created at national level or at Stage levels. It is urgent.</p> <ul style="list-style-type: none"> The veterinary branch, as a paying profession, should be encouraged. The allied science and research in this area is woefully lacking. Zoos need expert vets, at all times You may like to take this up with the concerned Ministry in Delhi 	be addressed eventually by respective departments.
27	Student of Andhra Pradesh	<p>Hello Sir,</p> <p>Need Zoological Park in Kurnool district, Andhra Pradesh. Please take a look at my request.</p>	<ul style="list-style-type: none"> Suitable action will be taken up in this regard on receipt of proposal from the State Government.
28	डा. समरेंद्र बहादुर सिंह पशु चिकित्सक पदाधिकारी पटना जू	<p>माननीय मंत्री महोदय से अनुरोध करना है की -</p> <p>वन्यजीव चिकित्सा के क्षेत्र में कार्यरत पशु चिकित्सको हेतु पर्यावरण वन एवं जलवायु परिवर्तन विभाग में प्रमोशन का स्कोप रखा जाए जिससे अनुभवी चिकित्सक अपने विभाग में न जा सके प्रमोशन का स्कोप नहीं होने से दुविधा की स्थिति बनी रहती हैं </p>	<ul style="list-style-type: none"> This aspect requires collaboration and inputs from various departments and the same may be addressed eventually by respective departments.

Annexure 3

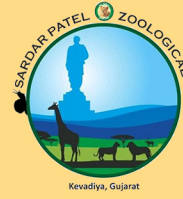
List of participants and resource people

S No	Name of the Participant	Designation	Organization	Email ID
1	Dr. A M Pawde	Principal Scientist and In-charge	Indian Veterinary Research Institute, Izatnagar, Bareilly, Uttar Pradesh	cwlincharge@gmail.com
2	Smt A. Nagamani	Dy. Curator	Nehru Zoological Park, Hyderabad, Telangana	nehruzoopark1@gmail.com
3	Dr. Abhijit Motghare	Veterinary Officer	Maharajbag Zoo, Nagpur, Maharashtra	abhijeet.motghare@rediffmail.com
4	Dr Abhishek Kumar	Director	Sakkarbaugh Zoo, Junagarh, Gujarat	directorsbz@gmail.com
5	Mr. Ajay Kumar	Evaluation Monitoring Assistant	Central Zoo Authority, New Delhi	ema-cza@nic.in
6	Mr. Ajit Kulkarni	Executive Director	Sri Chamarajendra Zoological Garden, Mysuru, Karnataka	zoomysore@gmail.com
7	Akshay Seth	Avian Expert	Wildlife SOS, New Delhi	
8	Mr. Amarnath Choudhary	Policy Assistant	Central Zoo Authority, New Delhi	an.choudhary@govcontractor.in
9	Dr. Amit Malik	IG	NTCA	ig-ntca@nic.in
10	Dr Aniket Patel	Veterinary Officer	Indroda Nature Park, Gandhinagar, Gujarat	aniketradadiya@gmail.com
11	Mr Anil Kumar T.V	Superintendent	Zoological Park, Thiruvananthapuram, Kerala	tvani4u@gmail.com
12	Mr. Arif Theba	RFO	Indroda Nature Park, Gandhinagar, Gujarat	ariftheba77@gmail.com
13	Mr. Ashish Goswami	Secretary	People For Animals, Wardha	ashish_pfa@yahoo.com
14	Dr. Ashish Kumar	Sr. Veterinary Officer	M C Zoological Park, Chhatbir, Punjab	mczpchhatbirvet@gmail.com
15	Mr. Ashok Kumar Jain	D.C.F. (S.F.S) and Assistant Director	Van Vihar National Park and Zoo, Bhopal, Madhya Pradesh	fdvanvnp.bpl@mp.gov.in
16	Dr Atul Gupta	Veterinary Officer	Van Vihar National Park and Zoo, Bhopal, Madhya Pradesh	atulguptavet73@gmail.com
17	Dr. Avijit Biswas	In-charge & DGM	Indira Gandhi Park Zoo, Rourkela, Odisha	abiswas32163@yahoo.com
18	Mr. B S Khati	W L Inspector	WCCB, New Delhi	wli1wr@wccb.gov.in
19	Mr. Baiju Raj M V	Director Conservation Program	WSOS Agra Bear Rescue Facility, Agra,	baiju@wildlifesos.org
20	Dr. Basvaraj Holeyacchi	Director	Padmaja Naidu Himalayan Zoological Park, Darjeeling, West Bengal	pnhzip@gmail.com
21	Dr Bhaskar Choudhary	Officer -In-Charge	Centre For Wildlife Rehabilitation and Conservation, Kaziranga Tiger Reserve	bhaskar@wti.org.in
22	Dr Bipul Chaukrabarty	Director	Tata Steel Zoological Park, Jamshedpur, Jharkhand	bipulchakrabarty@gmail.com
23	Mr. D S Baghel	Liaison Officer	WCCB, New Delhi	
24	Dr. Devanand Sirsat	Curator	Veermata Jijabai Bhosale Udyan and Zoo, Mumbai, Maharashtra	sirsatdevanand@gmail.com
25	Dr. Devender Kumar	Evaluation Monitoring Officer	Central Zoo Authority, New Delhi	emo-cza@nic.in
26	Dipak Sawant	Curator	Balasaheb Thackrey Gorewada International Zoo, Nagpur, Maharashtra	dipaktheraptor@gmail.com
27	Mr. G.D.Sarvaiya	ACF	Vishavdar Gir West	
28	Dr. Gowri Mallapur	Veterinary Consultant	Central Zoo Authority, New Delhi	vets-cza@govcontractor.in
29	Mr. H V Girisha	Joint Director	WCCB, New Delhi	jdadm@wccb.gov.in

30	Dr. H.Raja Mohan	CCF Director	Shaheed Ashfaq Ullah Khan Prani Sangrahalay, Gorakhpur, Uttar Pradesh	rajamohan.hari@gmail.com
31	Mr. Harpal Singh	Education Officer	M C Zoological Park, Chhatbir, Punjab	zooeducationofficer@gmail.com
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