

7th Field based training on

ADVANCES IN WILDLIFE RESEARCH WITH SPECIAL EMPHASIS ON SLOTH BEAR CONSERVATION IN INDIA

Dr Nishith Dharaia

WCB Research Foundation

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7TH FIELD-BASED TRAINING ON

ADVANCES IN WILDLIFE RESEARCH WITH SPECIAL EMPHASIS ON SLOTH BEAR CONSERVATION IN INDIA

JOINTLY ORGANISED BY

WCB Research Foundation, India

&

International Association for Bear Research & Management (IBA), USA

SUPPORTED BY

AZA SAFE: Saving Animals from Extinction

BMR Wildlife Services

Bharti Cam

VENUE

Scouts Camping Ground-2, Opp. Gujarat Toran, Gaumukh Road, Mount Abu,
Rajasthan

TRAINING DURATION

9th to 13th April, 2025



BhartiCam

ACKNOWLEDGEMENTS

I am grateful to the International Association for Bear Research & Management (IBA), USA, for providing financial assistance to organize this training program under the IBA Experience and Exchange Grant. I sincerely acknowledge the financial and logistical support provided by the Wildlife and Conservation Biology (WCB) Research Foundation, India and AZA SAFE: Saving Animals from Extinction, USA in making this training a success.

I extend my thanks to Mr. Jitendra Bhati, Head of the Scout Centre, Mount Abu (Rajasthan), for providing the venue and necessary infrastructure for this training at the Scout Ground.

Field exercises were conducted in the Mount Abu Forest area, and I am thankful to the Deputy Conservator of Forests, Mount Abu, for granting the necessary permissions for the fieldwork.

I would like to thank the key resource persons Dr. Aroon Sha, Dr. Utkarsh Prajapati, Mr. Pratik Desai, Mr. Vishal Patel, Ms. Bhagyashree Dangar, and Ms. Sakhi Dabhi for delivering insightful talks on various aspects of bear habitats and biology. Thanks, are also due to Dr Jennapher and Dr Frank Van-Manen for their online sessions and addressing the trainees.

Special thanks to Mr. Rajendrasinh Jadeja for being instrumental in selecting and arranging the wonderful venue for this training program. I would also like to thank Mr. Rashmin Savaliya for his assistance in drafting this report and Mr. Mayank Judal for designing it.

Finally, I am grateful to all the young researchers across the different states of India who participated in the training, sharing their experiences and knowledge with us.

~Nishith Dharaiya



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WILDLIFE AND CONSERVATION BIOLOGY (WCB) RESEARCH FOUNDATION



The Wildlife and Conservation Biology (WCB) Research Foundation is a non-profit organisation registered with the Government of India, established in September 2020. The foundation was established with the goal of accelerating action-oriented research and enhancing the capacity of students for research and development in the field of wildlife and conservation biology. We are committed to science-based conservation and outreach activities through research and development.

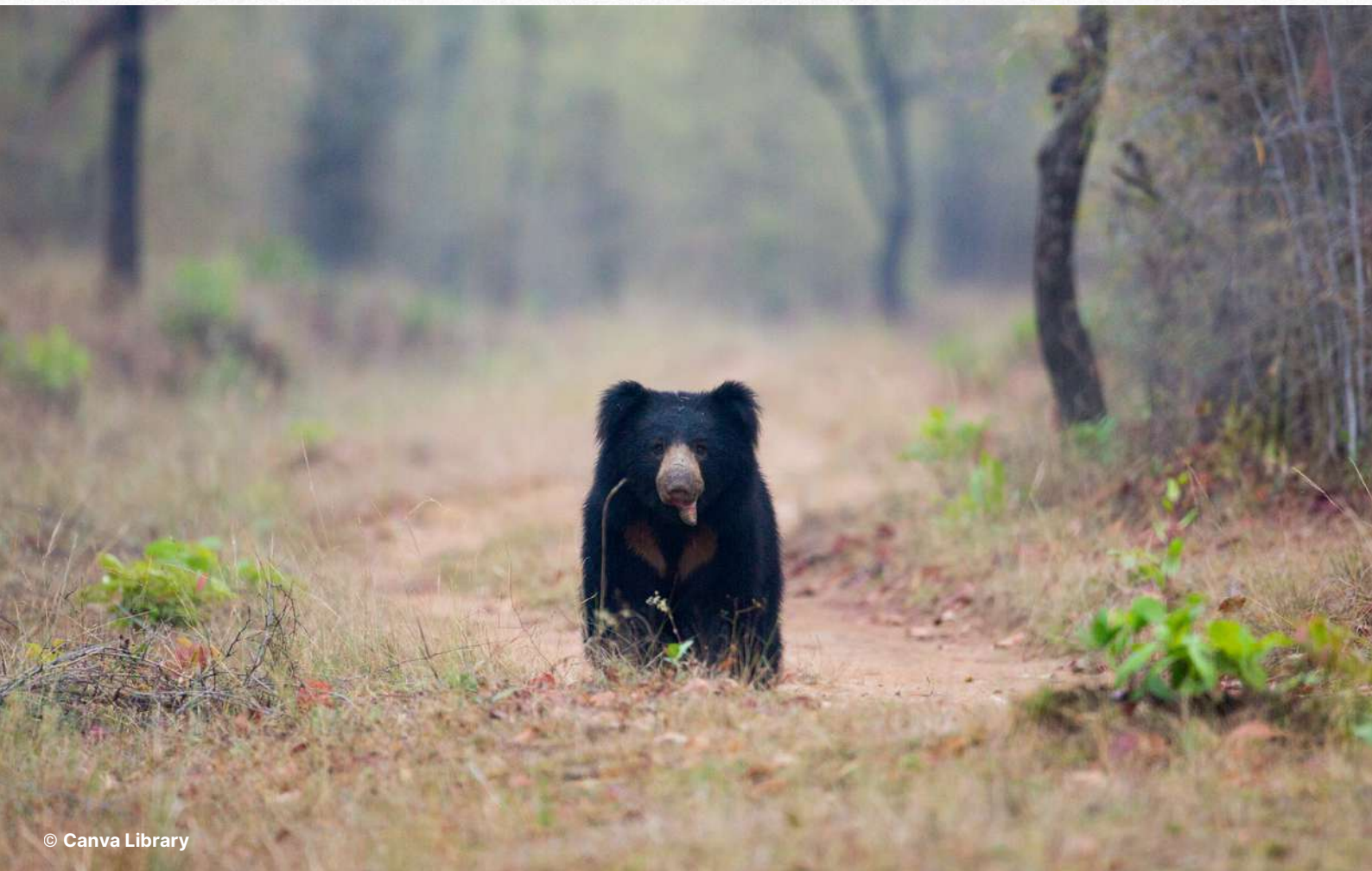
We offer and encourage exchange programmes with organisations and institutes with similar interests and are open to bilateral programmes related to wildlife and conservation biology. Currently, we have four ongoing research and conservation projects in different parts of India.

Our goal is to encourage young students to make their careers in the field of wildlife conservation and enhance their capacity through training and workshops.

INTERNATIONAL ASSOCIATION FOR BEAR RESEARCH AND MANAGEMENT (IBA)



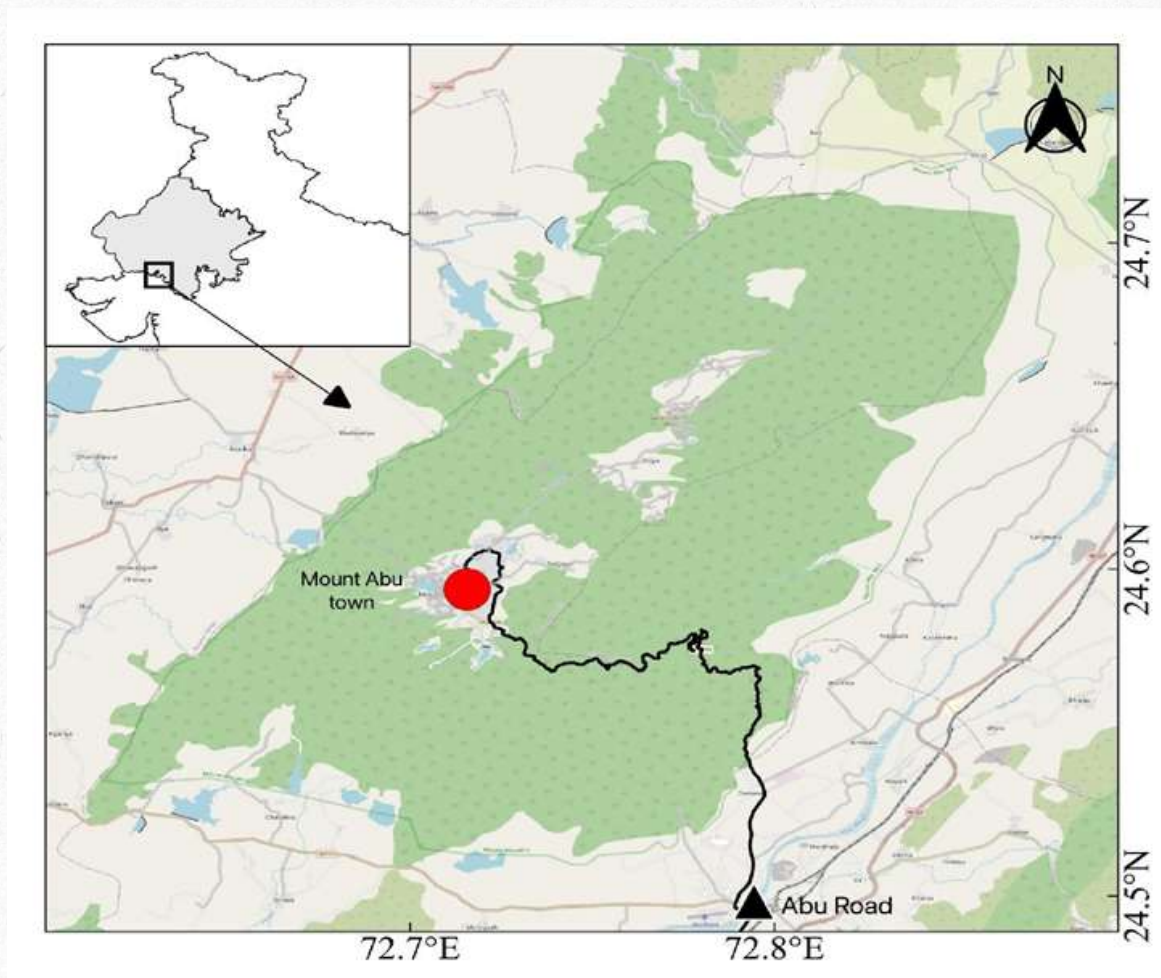
The International Association for Bear Research and Management (IBA) is a non-profit, tax-exempt professional society dedicated to the conservation of all eight bear species worldwide. Founded in 1968, it brings together biologists, wildlife managers, conservationists, and educators from over 45 countries, with a membership of more than 500 professionals. Its mission is to advance scientific understanding and conservation of bears through research, management, education, and international collaboration, striving for a future where bears and humans can coexist. IBA publishes *Ursus*, the only peer-reviewed scientific journal devoted exclusively to bears, along with the quarterly *International Bear News*, produced in partnership with the IUCN Bear Specialist Group. The organization also hosts international conferences that serve as key platforms for sharing research and building collaboration. Beyond publications and events, IBA provides research grants, promotes science-based management practices, and supports public education and awareness initiatives. Through these efforts, IBA acts as a central hub for knowledge exchange and global networking, playing a vital role in shaping the future of bear conservation.



TRAINING LOCATION

Mount Abu is the only hill station in Rajasthan, located in the Aravalli Mountain range in the Sirohi district. It is about 1,220 meters above sea level and offers a cool and pleasant climate, making it a perfect escape from the hot desert weather. The town is known for its green forests, peaceful lakes, and beautiful views.

One of the main attractions of Mount Abu is the Mount Abu Wildlife Sanctuary, established in 1960. It covers an area of about 19 km in length and 6 km in width. It starts from 300 meters and goes up to 1,722 meters at Guru Shikhar, the highest peak in Rajasthan. This difference in height helps many plants and animals live here. The sanctuary is home to around 820 plant species from 112 different families. It is the only place in Rajasthan where orchids grow. There are also wild roses, ferns, and bamboo forests in some parts of the sanctuary.



Map of Mount Abu, Rajasthan

The animal life in the sanctuary is also rich. Some animals found here include Indian leopard (*Panthera pardus fusca*), Sloth Bear (*Melursus ursinus*), Sambar Deer (*Rusa unicolor*), Wild Boars (*Sus scrofa*), and Chinkara (*Gazella bennettii*), Hanuman Langur (*Semnopithecus*), Jungle Cat (*Felis chaus*), Hyena (*Hyaena hyaena*), Jackal (*Canis aureus*), Fox (*Vulpes bengalensis*), Mongooses (*Herpestes spp.*), and Indian Porcupine (*Hystrix indica*). Historically, Asiatic lions (*Panthera leo persica*) and Bengal tigers (*Panthera tigris tigris*) also lived here. The sanctuary is a great place for bird lovers. Over 250 bird species are found here, including the Grey Junglefowl (*Gallus sonneratii*) and the rare Green Avadavat (*Amandava formosa*). Other birds like Peacock (*Pavo cristatus*), Partridge's species, and Bee-eaters (Meropidae family) are also commonly seen.

Apart from nature, Mount Abu also has many cultural and historical sites. The Dilwara Jain Temples, built between the 11th and 13th centuries, are famous for their beautiful marble carvings. Nakki Lake is a lovely spot for boating and walking. Guru Shikhar offers amazing views of the hills. Mount Abu also has a lively market where you can buy handicrafts, textiles, and souvenirs. The local food, with Flavors from Rajasthan and Gujarat, includes dishes like dal bati churma, gatte ki sabzi, and sweet treats.

With its mix of natural beauty, wildlife, history, and local culture, Mount Abu is a wonderful place to visit for people of all ages.



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ABOUT THE TRAINING PROGRAMME

The field-based training on “Advances in Wildlife Research with special emphasis on Sloth bear Conservation in India” was organised in association with IBA and WCB Research Foundation to enhance the capacity of young researchers to conduct research and monitoring of bears and their habitat in India. This field-based training was designed to introduce the contemporary field techniques used in bear research and monitoring and provide a hands-on experience so that the participants can employ these techniques in their respective areas of interest and aid the conservation of the four species of bears in India.

WCB has been organising such training programmes since 2015 through HNG University of Gujarat to encourage researchers to study different aspects of bear ecology. Previous training was conducted with Department of Forestry, Wildlife & Environmental Sciences of Guru Ghasidas University with selected young researchers from field of wildlife background. This time, we exclusively selected researchers and passionate people in the field of wildlife science to participate as we aimed to motivate as many individuals as we could to work towards sloth bear conservation in India through this training. We are grateful to IBA, the global bear research and conservation organisation for supporting this training programme through the ‘Experience and Exchange’ grant.

Participants are able to build their problem-solving and communication skills and link to a strong community of practice created by the WCB and IBA since 2023.

The main objectives of this training course are

- To encourage science-based monitoring and assessment of bears and bear habitats.
- Identifying the research problems and designing effective methodology whilst using the recent techniques available, especially for bears.
- To generate a community of practitioners who can conduct effective research on bears that help

INAUGURATION SESSION

The training programme was inaugurated on 9th April, 2025 by Dr. Nishith Dharaiya, Course Coordinator and the Founder and Director of the WCB Research Foundation, in the presence of Mr. Rajendrasinh Jadeja a retired scientist from CEE (Centre for Environment Education), Mr. Pratikkumar Desai, Co-founder and the Director of Operations of WCB Research Foundation, and the other resource persons and faculty members of the Scouts Camping Ground.

During the inaugural ceremony, Mr. Pratikkumar Desai gave the welcome address and Dr. Nishith Dharaiya provided a brief introduction of WCB-IBA bear training. He also detailed about the venue, and activities to be organised during the training period. Dr. Dharaiya has explained the significance of conducting this training for young and aspiring people in the field of wildlife conservation. He emphasised the importance of managing sloth bears and associated wildlife through recent scientific techniques. Mr. Rajendrasinh gave brief about the Mount Abu area with his vast experience.

At the end of inaugural function, all the participants were divided into group by randomly selecting their id-card, serving as an interactive ice-breaker to get the training started.



Inauguration



Welcoming Participants

Rajendrasinh Jadeja, Guest of Honor



Table 1: Different topics covered in the training program

Topic	Resource person	Classroom/Field
Introduction WCB, IBA and SAFE Program	Nishith Dharaiya	Classroom
About IBA, IBA student council and opportunities	Sakhi Dabhi	Classroom
Bears of the world and their conservation status	Nishith Dharaiya	Classroom
Grant writing protocols and opportunities in bear research	Nishith Dharaiya	Classroom
Camera trapping theory, applications and demonstration	Pratikkumar Desai	Classroom and Field
Bear research and opportunities by IBA	Jennapher T VanManen	Classroom
Studying Grizzly bears in north America	Frank Van Manen	Classroom
Sloth bear management and conservation	Thomas Sharp	Classroom
Sloth bear population monitoring	Utkarsh Prajapati	Classroom and Field
Vegetation assessment and habitat evaluation	Bhagyashri Dangar	Classroom
Vegetation sampling and data collection	Bhagyashri Dangar	Field
Compilation of field data	Pratikkumar Desai	Classroom
Basics of GIS and its applications	Vishal Patel	Classroom
Sloth bear Range Mapping	Vishal Patel	Classroom
GIS and Range Mapping Hands-on	Vishal Patel	Classroom
Human-sloth bear conflicts and their mitigation	Nishith Dharaiya	Classroom
Advancing bear research and opportunities	Nishith Dharaiya	Classroom
Microbiology and Genetics	Sakhi Dabhi	Classroom

Studying sloth bears in captivity, health and rescue	Arun Sha	Classroom
Compilation of field data and working on	Pratik Desai, Utkarsh Prajapati	Classroom
Questioner, Interview and Data collection on people perception about the human Sloth Bear interaction	Nishith Dharaiya	Classroom and Field
Project Presentation	Pratik Desai, Sakhi Dabhi	Classroom
Valedictory function	Nishith Dharaiya	Classroom



CLASSROOM SESSIONS

The classroom sessions were conducted in a classroom of Scouts Camping Ground-2, Mount Abu, Rajasthan. The participants were asked to continue working with their group to ensure maximum opportunity for interaction and exchange of knowledge. During the five-day programme, different offline classroom sessions were held. The sessions were conducted by the experts from the WCB Research Foundation and wildlife SOS (Table 1). An online session was attended with SAFE on Sloth Bear management and conservation by Thomas Sharp and online call was organised with Jennapher Teunissen van Manen, the Director of operations and programs, the International Association for Bear Research & Management (IBA), USA and Frank T. van Manen, chair of experience and exchange grant, IBA. Jennapher spoke about the work carried out by the IBA, how crucial it is to conserve the vulnerable sloth bear and its habitats, and Frank spoke about their work on Grizzly bear, and encouraged questions from the participants. After all the sessions were done for the day, an open forum was conducted where participants were asked to provide honest feedback on the training sessions for that day and provide suggestions, if any.

Though optional, participants were encouraged to prepare their own project proposals and work with assigned mentors. Four participants presented their proposals on the final day of the training and were evaluated by the WCB Research Foundation team and other participants by posing various questions on their topics. This gave them much-needed insights into drafting project proposals, defending their project ideas, and presenting their work. Two of the four project proposals were selected as in-house projects of WCB Research Foundation which would receive mentorship and help in draft of project proposal for grant and possible instrumental support will provide from the WCB Research Foundation.



Bears of the World

Dr Nishith Dharaia



Introduction of IBA Student Council

Ms Sakhi Dabhi



Camera Trapping

Mr Pratik Desai



Online Session on Sloth bear Management & Conservation

Mr Thomas Sharp



Vegetation Assessment & Habitat Evaluation

Ms Bhagyashri Dangar



Sloth bear Population Monitoring

Dr Utkarsh Prajapati



Special Session on IBA's Global Mission for Bear Conservation & Bear Research Methods

Dr Jennapher & Dr Frank, IBA, USA



Sign Survey

Dr Nishith Dharaiya



GIS & Sloth bear Range Mapping

Mr Vishal Patel



Human-sloth bear Conflicts and their Mitigation

Dr Nishith Dharaiya



Opportunities in Bear Research

Dr Nishith Dharaiya



Microbiology and Genetics

Ms Sakhi Dabhi



Studying Sloth bears in Captivity, Sloth bear Health and Sloth bear Rescue

Dr Arun Sha



Project Presentation by Participants



FIELD SESSIONS

Based on the classroom sessions, several field sessions were conducted at Mount Abu wildlife sanctuary. Prior to heading out to the field, the participants were trained to prepare their own datasheets and use GPS devices as well as using mobile applications.

From the first field session, the participants were divided into small groups of 4-5 individuals and assigned a team leader. Each group was dropped off at different locations with team leader then they select forest trail for deployment of camera traps. The survey data and the camera trap photos were later analysed after returning to the classroom.

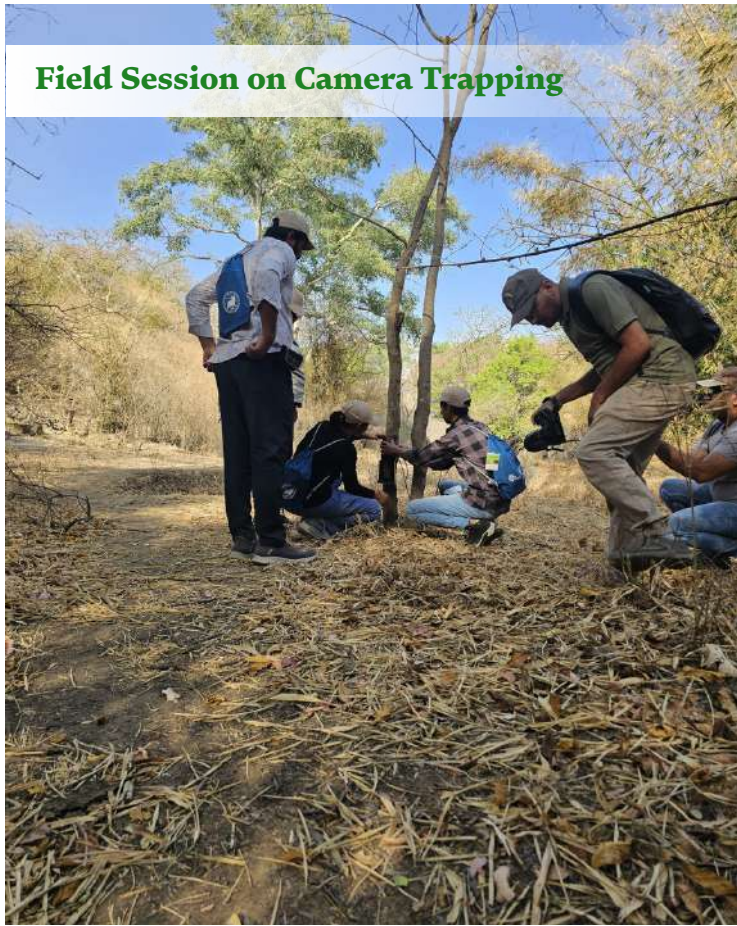
The second field session, each group was dropped off at different locations with team leader they then conducted field surveys to identify sloth bear signs such as scats, scratch marks, destroyed termite mounds, and holes in the ground and also conduct vegetation survey and collect the data.

The third field session, each team go to different location of Mount Abu with their prepared questioner form and conduct survey and interview of local people to know about the people perception on human sloth bear interaction.

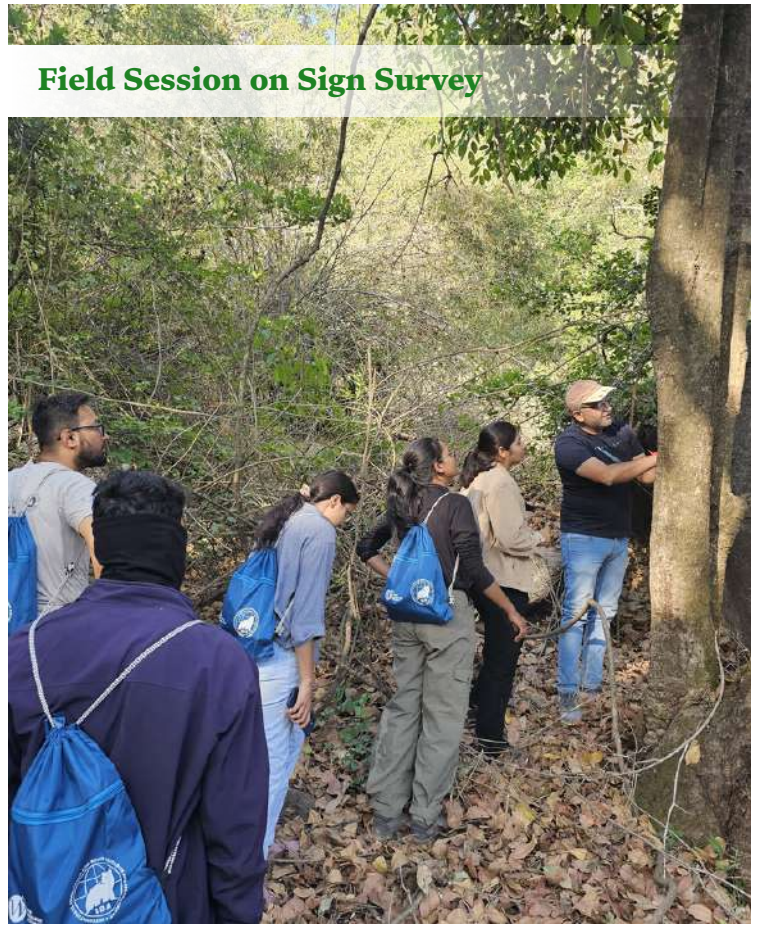
In the fourth field session, each team leader retrieval camera trap at their assigned location around the field station. The survey data and the camera trap photos were later analysed during the classroom season.



Field Session on Camera Trapping



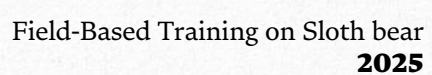
Field Session on Sign Survey



Participants Engaging Locals to Understand their Perceptions



- Capacity building of young researchers in the field of wildlife conservation focusing on sloth bear research
- Increased awareness about sloth bears and other Indian bear species.
- Learning of advanced research techniques such as genetic analysis, bear microbiology, GIS mapping, Occupancy modelling



VALEDICTORY SESSION

The training programme culminated in a valedictory session hosted by Nishith Dharaiya. Participant feedback was sought out during this time where they highlighted the most important learnings they received from the training. All the trainees received certificates proving they had successfully completed the training programme. Two of the participants (Ms Amrin and Ms Astha) who presented their project proposals were awarded for the best presentation and got the special opportunity to carry out their projects as WCB's in-house projects. Mr. Rudradeb Sarkar and Mr. Mayank Bagchi are awarded as best trainee throughout the training and Mr. Rounak Choudhary was selected as best interviewer among all the participants.



Certificate Distribution



Best Trainees

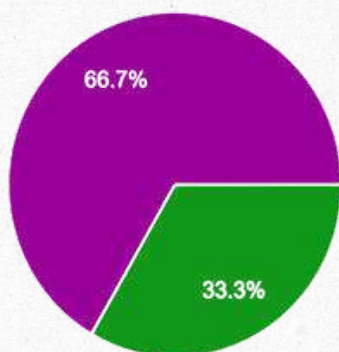


Honoring Our Resource Persons

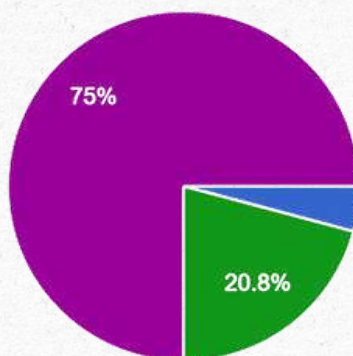


PARTICIPANT FEEDBACK

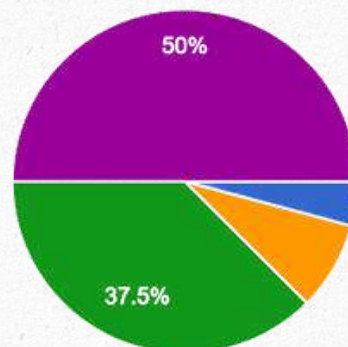
● Need Improvements
 ● Not bad
 ● Average
 ● Good
 ● Excellent



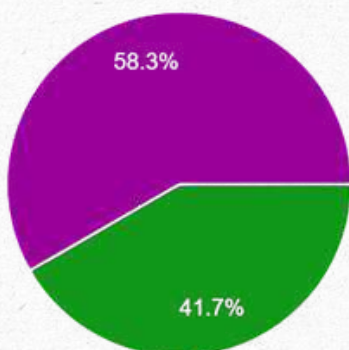
Registration Process



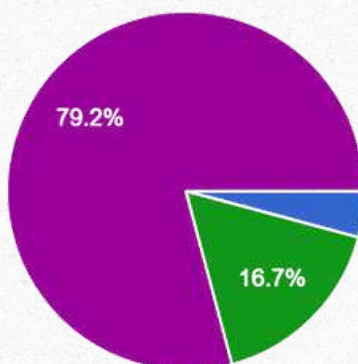
Pre-training Communication



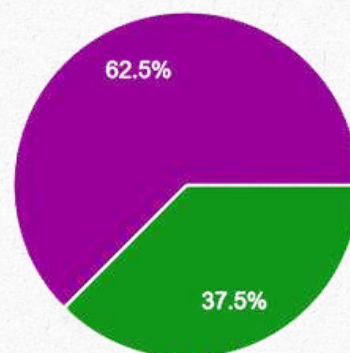
Accommodation



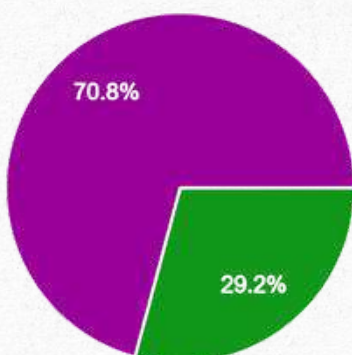
Food



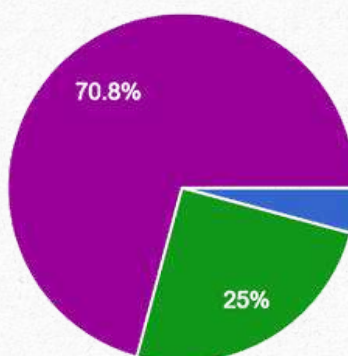
Training Kit & Reading Material



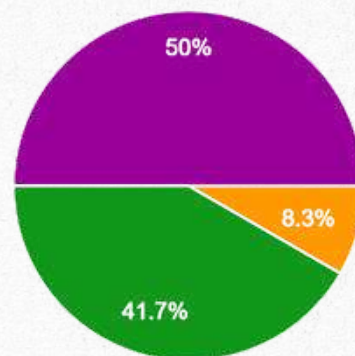
Course Curriculum



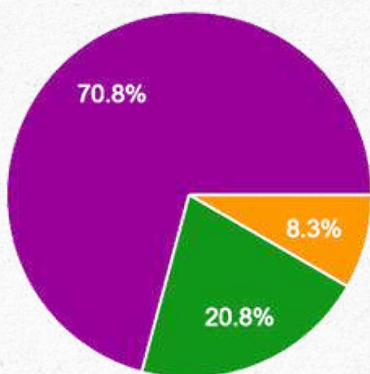
Course Instructors



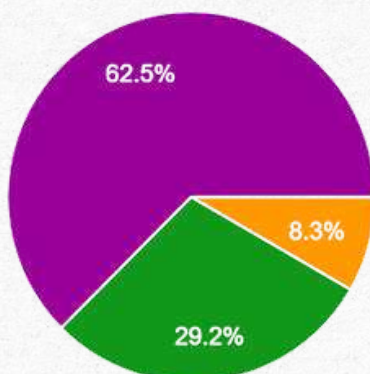
Introduction of WCB, IBA
and SAFE



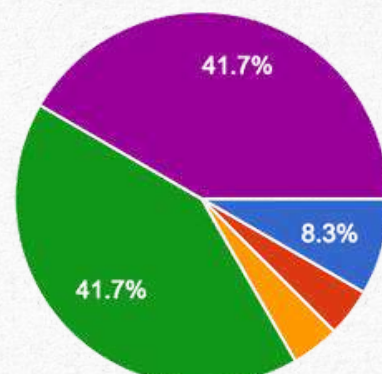
Session 1 (IBA Student
council)



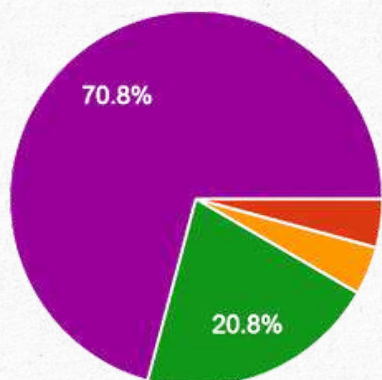
Session 2 (Bears of the world and their conservation status)



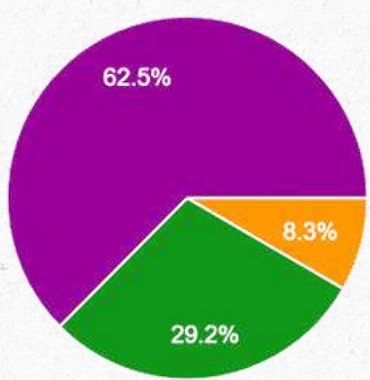
Session 3 (Camera trapping)



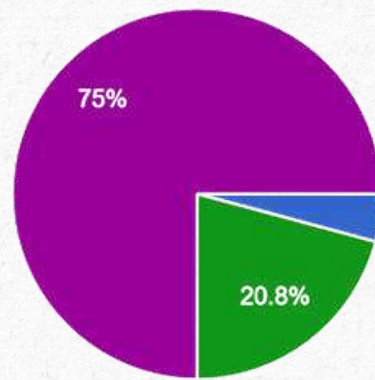
Special session (SMAC by Thomas Sharp)



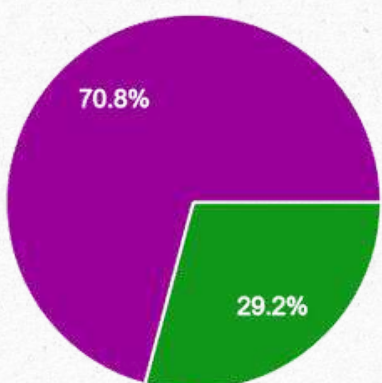
Session 4 (Sloth bear population monitoring)



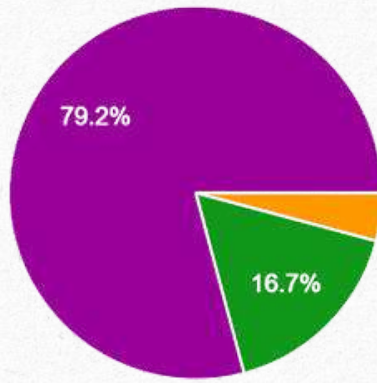
Session 5 (Habitat evaluation)



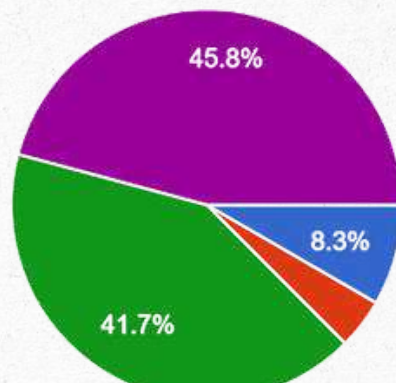
Field Work (Camera trap)



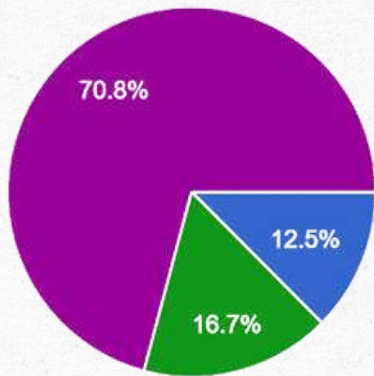
Session 6 (Sign survey)



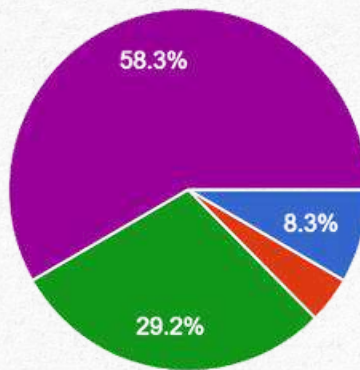
Field Work (Sign survey and vegetation)



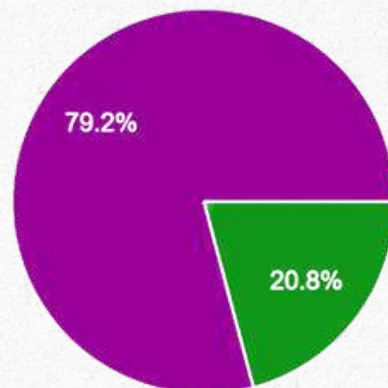
IBA special session



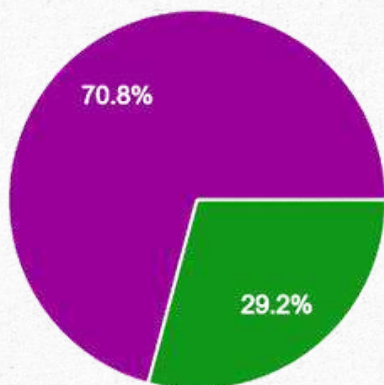
Session 7 (GIS)



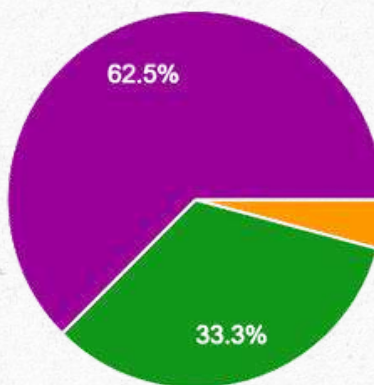
Session 8 (Range mapping)



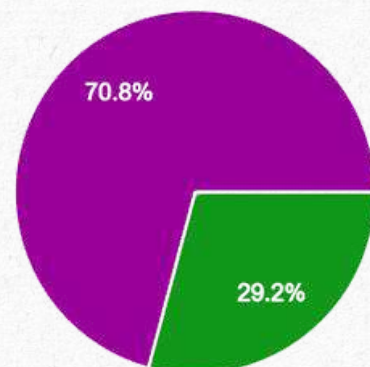
Session 9 (Human-sloth bear conflict)



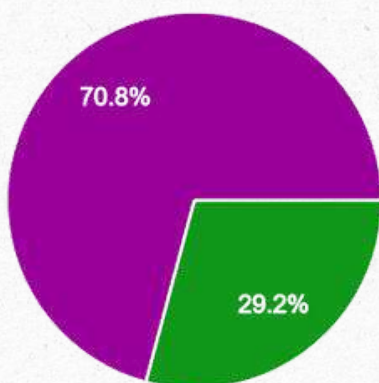
Session 10 (Advance bear research and funding sources)



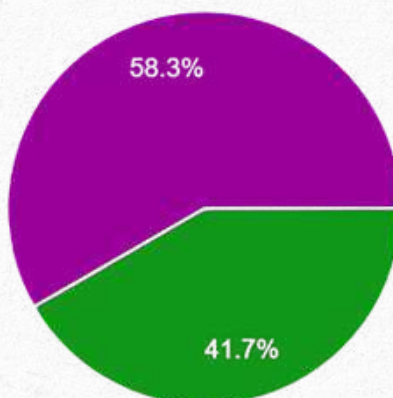
Session 11 (Microbiology and Genetics)



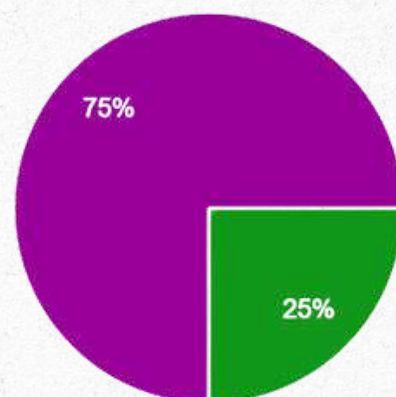
Session 12 (Study in captivity, health and rescue)



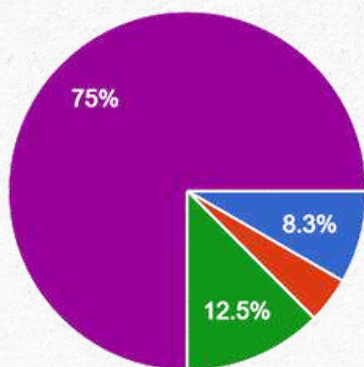
Mentoring for writing projects



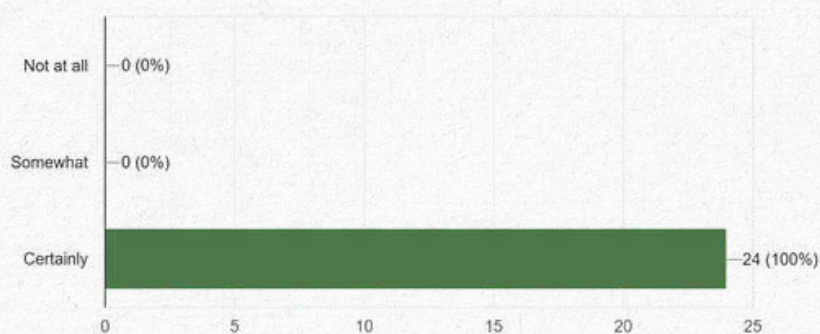
Field exercise for people perception



Coordination of the training



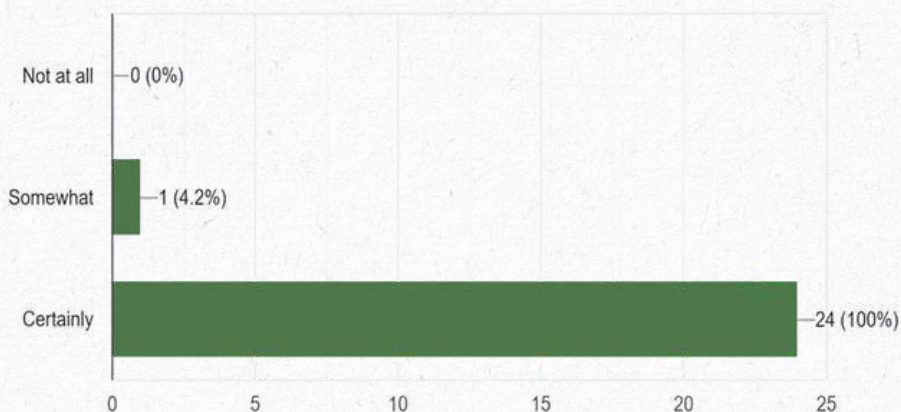
Time management



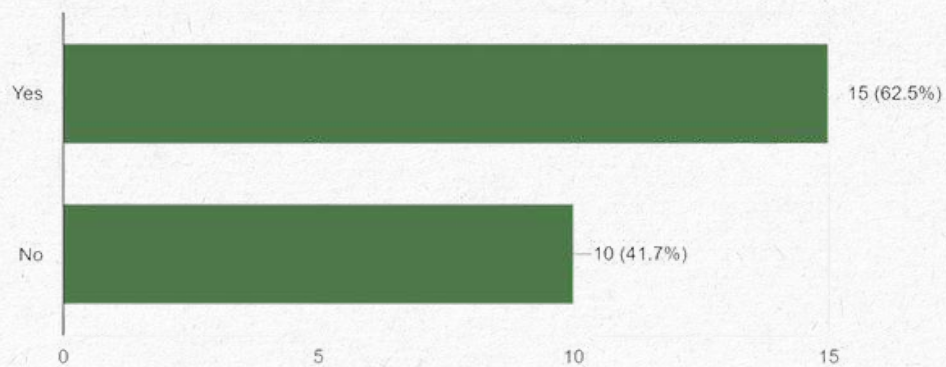
Do you think this training would be helpful in your further career?



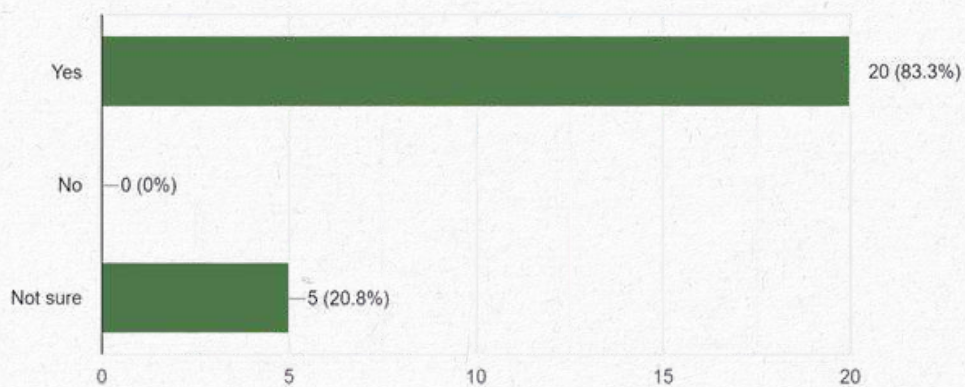
Do you think that we should continue organizing such training in future



Does the training improve your skills?



Is the time duration is appropriate for this training?



Would you like to continue or involve in Bear Conservation and Research?

Annexure 1

List of Participants

Sr. No.	Name of Participant	Location
1	Aditi Patriya	Rajasthan
2	Akash Ashok Ahale	Maharashtra
3	Amrin Taiba Ansari	Himachal Pradesh
4	Anchita Kalita	Assam
5	Anoml Singh	Maharashtra
6	Arddhendu Sekhar Sahoo	Tamil Nadu
7	Astha Gautam	Delhi
8	Athrava Sing Chauhan	Madhya Pradesh
9	Gaurav Dhawade	Madhya Pradesh
10	Ishita Rathore	Uttar Pradesh
11	Jasveer Kaur	Rajasthan
12	Lokesh Daiya	Rajasthan
13	Mahesh Kumar	Rajasthan
14	Malek Saheban Shafirmiya	Gujarat
15	Mori Mukeshkumar	Gujarat
16	Mani Bhushan Meena	Rajasthan
17	Manisha Timalisina	Nepal
18	Satyendra Singh	Bihar
19	Mayank Bagchi	Chhattisgarh
20	Mayank Sharma	Rajasthan
21	Naman Songara	Rajasthan
22	Pinki Kumari	Rajasthan
23	Piyush Chavda	Madhya Pradesh
24	Preetam Singh Rathod	Gujarat

25	Rounak Choudhary	Rajasthan
26	Rudradeb Sarkar	West Bengal
27	Vaishnavi Haridas Karale	Maharashtra
28	Vandana Karera	Haryana
29	Vineet Maheshwari	Gujarat

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