



WILDLIFE CONSERVATION TRUST **ANNUAL REPORT**

2021-22



WILDLIFE CONSERVATION TRUST

ANNUAL REPORT

2021-22

2021-22

Wildlife Conservation Trust, India

Cover Photo: Dr. Anish Andheria

WCT has registrations under Section 80G of the Income Tax Act, 1961; Section 12-A (a) of the Income Tax Act, 1961; Bombay Public Trust Act 1950; and the Foreign Contribution Regulation Act, 2010

THIS REPORT IS FOR INTERNAL CIRCULATION ONLY

CHAIRMAN'S MESSAGE

Hello Friends,

I sincerely hope that each one of you is healthy considering how challenging the past two years have been for all of us. I applaud you for staying strong and hopeful through these trying times.

I am equally proud of the WCT team for pulling off important tasks with aplomb despite the challenges they have faced on personal and professional fronts owing to the COVID-19 pandemic. For WCT, the welfare of its staff has always been the topmost priority.

I would like to present to you the **WCT Annual Report 2021-22** within whose pages you will get to see the progress made on different conservation projects, new projects that we have embarked upon, and the key achievements.

Climate change has rightfully metamorphosed into a grave global concern. Its impact manifests differently for different countries, different altitudes and also different communities within a country. India with over 1.4 billion people is highly vulnerable to the vagaries of nature. The best and the most long lasting safeguard for densely populated countries such as India is the sustenance of existing and revival of the degraded terrestrial and marine ecosystems.

WCT believes that ecological conservation precedes economic stability. By securing forests, mountains, coasts and rivers, India will be able to build resilience in the tens of millions of people who are directly or indirectly dependent on these ecosystems for their daily subsistence needs.

WCT's vision to safeguard India's natural heritage has never wavered. Despite the challenges thrown at us by the pandemic-induced restriction of movement and access to some of our field sites, we have come out stronger, with an even stronger resolve to protect ecosystems, which is crucial to climate action and also to communities so that they can become climate resilient.

I thank all of you for supporting our endeavour and urge you to keep showering us with generous support and wisdom, so that we can continue to strive harder at finding scalable and long-lasting solutions to mitigate the negative impacts of climate change and help reverse biodiversity loss.

Thanking you,

Hemendra Kothari

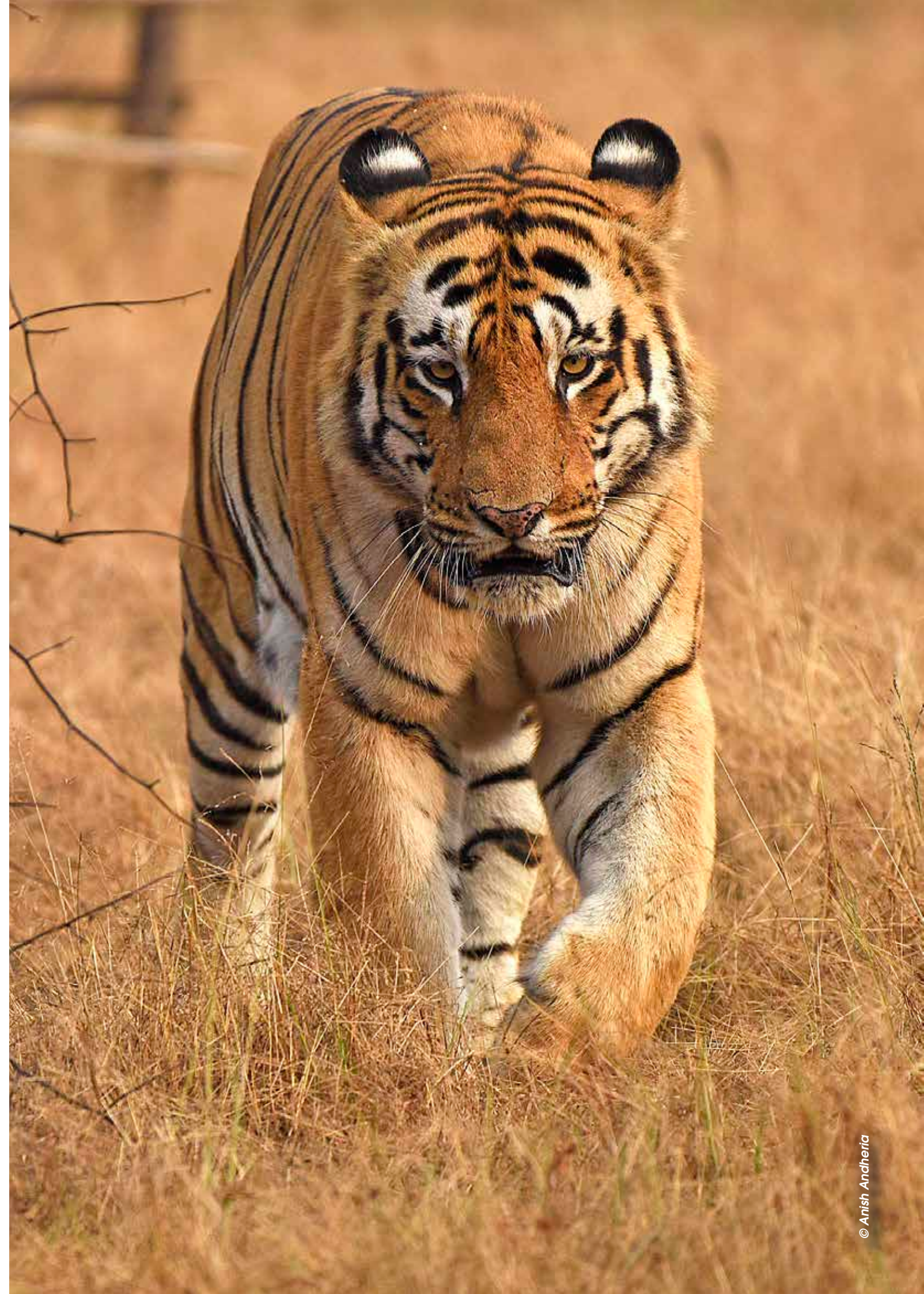


Trustees

Mr. Hemendra Kothari
Mr. Bittu Sahgal
Ms. Aditi Kothari Desai
Ms. Shuchi Kothari

Advisory Board

Mr. Subramaniam Ramodarai
Ms. Naina Lal Kidwai
Mr. Amit Chandra
Mr. Prashant Trivedi
Mr. Dereck Joubert
Dr. Thomas Kaplan
Mr. Alok Kshirsagar
Mr. Anshu Jain



PRESIDENT'S MESSAGE

Dear well-wishers,

At the outset let me apologise for an unusually long message.

I would like to extend immense gratitude to each one of you, as it is your kind support that helps WCT do what it does. It is because of your support that we have been able to tide over the past two years, which have been particularly challenging. Your firm belief in us has helped us consolidate our existing conservation projects and broaden our scope by adding more projects and species focus, thus, catering to a greater conservation canvas.

The year 2021-2022 has been an interesting journey with respect to the work that we have undertaken. With the focused aim of strengthening on-ground forest protection, WCT has intensified its efforts to support and equip state Forest Departments as well as systematically build the capacity of the forest staff. This year WCT's Combatting Wildlife Crime programme extended its capacity building training sessions to the forest staff of the newly declared Conservation Reserves in the Sahyadri Tiger Landscape to improve forest protection in the region. This is a collaborative effort between WCT's Conservation Research and the Wildlife Law Enforcement and Forensics divisions to enhance our conservation outcomes in the northern Western Ghats.

Our work in the Western Ghats, which examined the status and change in distribution of tigers, leopards, dholes, and sloth bears, paid rich dividends as the state government declared eight new conservation reserves in the same landscape to bolster the connectivity for these large carnivores. To further reinforce the Forest Department's decision, we launched an intensive capacity building programme for the frontline forest staff of 11 Protected Areas (PAs), including these eight conservation reserves, in the field of wildlife law enforcement and forensics. Additionally, we are assisting the Forest Department in drafting the Management Plan for the northern Western Ghats corridor.

In the Satpura Tiger Reserve, Madhya Pradesh, we have managed to make considerable strides in two of our important Conservation Research projects centered around the highly endangered Indian pangolin and the extremely rare Eurasian otter. Along with the Madhya Pradesh Forest Department, we have so far successfully rehabilitated five Indian pangolins, which were seized by the Forest Department from wildlife traffickers. These individuals were radio-tagged before release, so that their whereabouts could be monitored across all seasons. Several months have passed and we are extremely pleased to report that all five pangolins have acclimatised



well in the Pench Tiger Reserve. In fact, one adult female has given birth and is successfully raising the baby. These are first-ever documented cases of successful rehabilitation of this critically endangered, nocturnal species. The Eurasian otter project is also shaping up well with a wealth of information being collected on the relationship between forest cover and river flow. Owing to the unprecedented situation arising due to the COVID-19 pandemic, we were unable to radio-tag the otters as scheduled. Now that the situation is much improved, we hope to carry out the first-of-its-kind radio-tagging operation on this enigmatic freshwater carnivore. Hopefully, we will have a plethora of interesting findings to share in the coming months.

Among our most socially and environmentally impactful projects, the sustainable water heater project has grown in scale and impact and is bringing about a positive behavioural change in local communities living in tiger corridors of Maharashtra with respect to the use of firewood. Our recent monitoring study has revealed that this simple solution will go a long way in not only arresting forest degradation to a great extent but also reducing the human-wildlife interactions in the region. We have been able to distribute and install 2,000 units of the environmentally sustainable, energy-efficient, and affordable biomass-fired water heaters in the village households so far, and are processing many more orders from other villages from the same landscape. A big boost to the project came about when the Maharashtra Forest Department decided to partner with us and support the distribution of the water heater in villages around the newly declared Kanhalgaon Wildlife Sanctuary as part of their Shyama Prasad Mukherjee Jan Van Vikas Yojana. This will allow us to scale-up the impact of the intervention in a big way.

I am happy to inform you that we have embarked upon a long-term journey to strengthen the integrity of the life-giving rivers of the Gangetic plains and central India through our conservation-action programmes on the Ganges river dolphin and the gharial. Our surveys to understand the interrelationship between river flow, sedimentation, fishers and aquatic biodiversity are yielding insights into the challenges faced by aquatic wildlife and also about the prospective solutions to ensure coexistence between highly marginalised fishing communities and aquatic fauna. Our 'Riverine Ecosystems And Livelihoods' (REAL) project aims to weave freshwater capture fisheries management into India's wildlife conservation planning to reduce the impact of the existing fishing practices that result in large number of deaths of dolphins, turtles, gharials, otters, and waterbirds due to entanglements in fishing nets and targeted hunting.

Our other long-term programmes in the fields of Wildlife Law Enforcement and Forensics, and Forest Staff Health monitoring are both playing a vital role in boosting the morale of the frontline forest staff. While the prior builds capacity in the forest staff to improve the conviction rates in wildlife crime cases, the latter increases our knowledge about the health needs and vulnerabilities of the forest staff, which will soon translate into a white paper that will push for forest staff-friendly policies.



Last but not the least, WCT's tiger population estimation programme that focuses on habitats outside the protected area network in Maharashtra and Madhya Pradesh continues to provide extremely fine-grained information on tiger source populations, bottlenecks, future conflict hotspots, prospective PAs or stepping stones, and vital regions for wildlife movement, all of which is being used in tandem to inform the state Forest Departments about the kind of interventions that are needed to strengthen corridor connectivity between the existing PAs. WCT's tiger data is being regularly used by the state Forest Departments to push for mitigation structures across linear infrastructure such as roads and railways.

Our highly experienced veterinarians are improving the overall understanding of the probability of disease spillover from livestock to wild prey and vice versa. The programme will soon get into the phase where the learning from Bandhavgarh and Sanjay Dubri Tiger Reserves will be shared with other PA managers. This is likely to help improve the effectiveness of the cattle inoculation programme in and around India's tiger reserves.

The COVID-19 outbreak and the following 18 months witnessed the fall of many strong teams – because their fieldwork suffered or due to the collapse of their funding partners or simply because they couldn't continue to communicate with the outside world. Communication with various constituencies through the website or social media handles is an important bridge builder in these difficult times. We are fortunate to have an extremely sensitive and hardworking communications team who did not lift its foot from the pedal – be it reports or op-eds or updating WCT's large number of followers on social media, our communications team virtually disseminated a day-to-day account of our work on the ground. They deserve a pat on their backs.

A special mention is due for all our funding partners. They have all stood by the organisation and its people during one of the most testing phases for an NGO. Without their support and understanding, my colleagues and I would not have been able to achieve even a fraction of what we have, especially during the last two years. The maturity that some of them have shown in helping us maintain a healthy cash flow, so that the field staff can continue to follow their mission, is exemplary. I take this opportunity to sincerely thank each one of them on behalf of my entire team for showing tremendous respect for our field staff.

No amount of gratitude is enough when it comes to the unflinching support I continue to receive from our Chairman, Mr. Hemendra Kothari. His encouragement has always guided me to forge ahead in my attempt to carve a niche for WCT by allowing its work to do the talking. Piggybacking on the high compliance standards set by him, I am proud to mention that currently, all our projects run on external funding. This was possible only because of the unconditional financial support he provided during the first decade, thereby allowing us to create a body of work that is considered as a gold standard in the field of conservation. I wish India gets many women and men, who are as deeply committed to the cause of conservation, as he is.

We humans are generally frugal at acknowledging the role of quiet workers. However, I am not going to make that grave mistake here. I want to go on record to state that WCT's backbone during the gruelling two years of COVID-19 has been its Accounts & Finance, HR, and Admin teams. These unsung heroes have continued to brave lockdowns, extremely tedious commutes and the risk of exposure to the virus to ensure that salaries are paid before time; programmatic monies are transferred into individual accounts so that field expenses can be incurred on schedule, and all HR-related eventualities are addressed without delay. I feel fortunate to be blessed with such a robust support system.

You will learn more about WCT's work and conservation strategy through this Annual Report.

Your feedback, queries and good wishes are most welcome.

Best,



Dr. Anish Andheria (Ph.D.)



SUSTAINING WCT

The evolution of the Wildlife Conservation Trust during the past 13 years is unique and we at WCT are proud to walk you through this journey.

WCT's Formative Phase, spanning the first few years, has been critical in its journey. It is characterised by our trustees' deep-rooted interest in nature conservation and their ability support the work in this space and partner with the government to bring about long-term impact. Being a philanthropist, the managing trustee supported the organisation's activities entirely during this initial phase.

Over the years, as the vision was fleshed out and on-ground programmes were undertaken in partnerships with the state forest departments, the organisation gradually moved into the Growth Phase, during which, WCT gained visibility and credibility as an organisation capable of delivering science-driven practical solutions. Challenges emerging from broadening operations and increasing outreach are but a natural part of such a growth cycle.

Recognising the need of the hour, the leaders of the organisation consciously steered WCT into the Consolidation and Rationalisation Phase, focusing on financial sustainability and project legacy for a more focused impact. WCT continually strived to finetune its processes and systems, establish more robust internal reporting structures and better-knit governance. Cost consciousness and reviews of programme costs became key focus areas as a part of the implementation mechanism. In addition, transparency, accountability and adherence to statutory regulations and compliance became precious cornerstones as it set to broaden and diversify the donor base in its journey towards financial sustainability. Being a conscious partner, WCT strives to identify programmes which can be handed over to the government or the community by building capacities in them to take ownership of these programmes.

This evolution has been significant and deep-rooted as WCT stands on the threshold of transitioning into the Institution Building phase. Characterised by establishing robust structures, succession-planning, long-term sustainability and further refinement of focus, WCT will capitalise on its strengths and fine tune its systems and processes. WCT has already embarked on the journey to define a high-level ten-year road map to concentrate on areas that align with its long-term vision. There will be lot more focus on strengthening partnerships with the line-departments of the government, corporates and other NGOs to scale-up our outcomes and impacts.



During the financial year 2021-22, in spite of the second and third waves of the COVID-19 pandemic, most of our projects have managed to stay on course. We at WCT continue to have a disciplined approach to budgeting and approaching corporates and multilateral organisations for funds. Project funding was committed for all projects within the first quarter, which gave us quality time to focus on project progress and fund utilisation. Falling interest rates, varying grant cycles of different corporates and fresh guidelines under the CSR funding and FCRA require constant monitoring and cash flow management. Adherence to compliances, stringent monitoring & evaluation and donor management form the core for long-term donor engagement.

WCT has always focused on instilling confidence in partners through a high-performance index ratio not only in implementation of the project at the ground level but also in exhibiting proficiency in governance and financial management. We believe that the donors are co-owners of the project and their funds have to be prudently expended to maximise returns for the project. This has led to deep-rooted relationships with funding agencies and corporate donors.

Having invested quality time in nurturing donor relationships and meeting our end-goals, WCT has managed to meet 85 percent of its costs through external benefactors, CSR funds, international grants and interest earned on corpus.

Needless to say, the organisation has evolved from an acorn to an oak since 2009.

The trustees and WCT team take this opportunity to acknowledge the contributions of our individual donors, corporate partners and international multilateral agencies whose support is invaluable to the organisation.

Best,

A blue ink handwritten signature.

Ami Gumastha,
Senior Advisor, WCT



CONTENTS

Our Backbone	01
Highlights	05
Departmental Reports	
• Conservation Research	11
• Conservation Behaviour	19
• Road Ecology	23
• Human-wildlife Interface Management	25
• Conservation Dogs Unit	29
• Combatting Wildlife Crime	31
• Health	33
• Communication and Outreach	35
Publications	41
Media Coverage	44
Providing Funds for Conservation	47



OUR BACKBONE

DEPARTMENTS



OUR DONORS

CSR Donations/Project Grants:



DSP ADIKO HOLDINGS PRIVATE LTD

DSP HMK HOLDINGS PRIVATE LTD



ILLUMINATI TRADING PRIVATE LIMITED

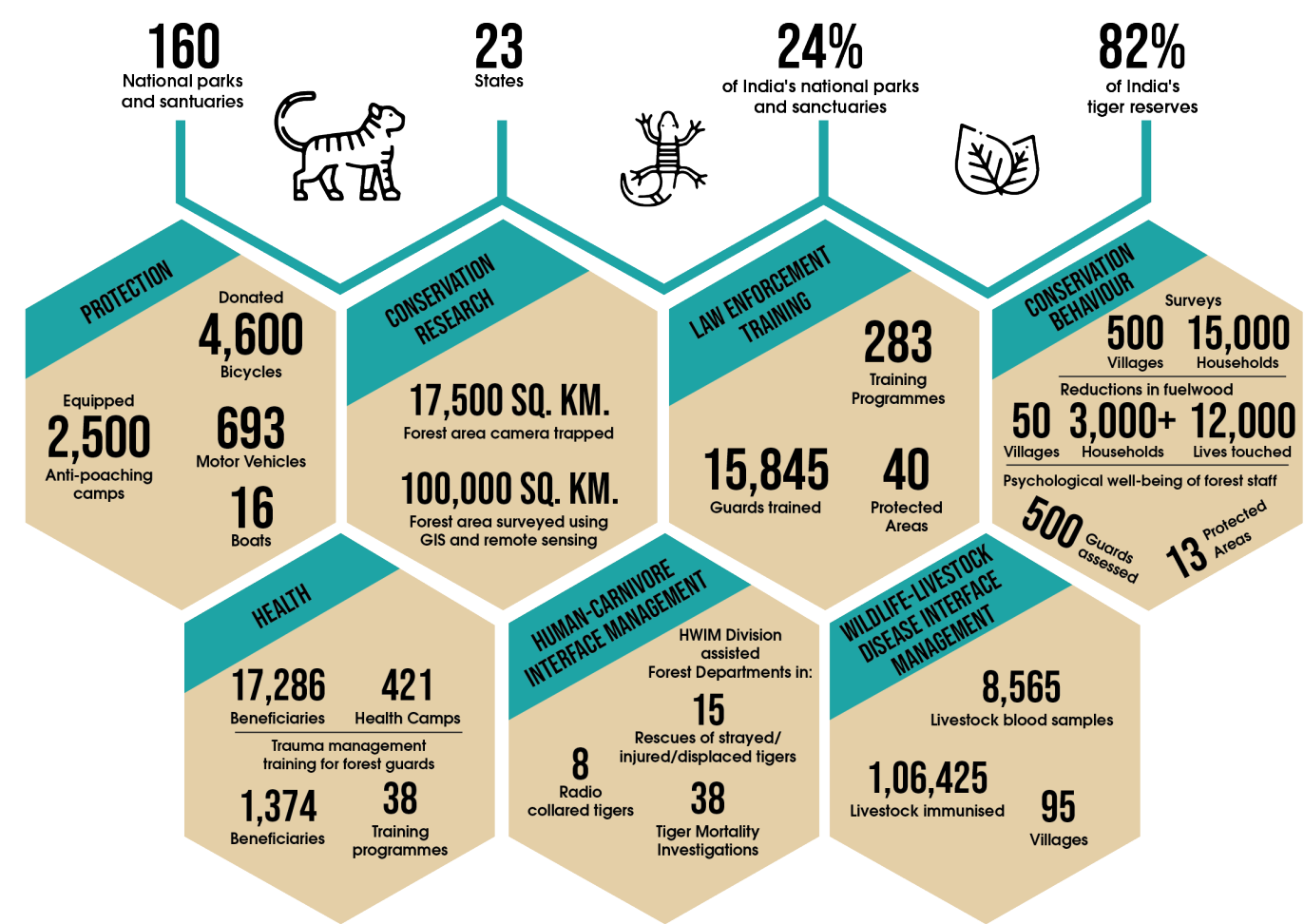


VAP TRADING PRIVATE LIMITED



We would like to thank all our individual donors for extending their support towards WCT's concerted conservation efforts. Every donation is highly valued.

OUR REACH

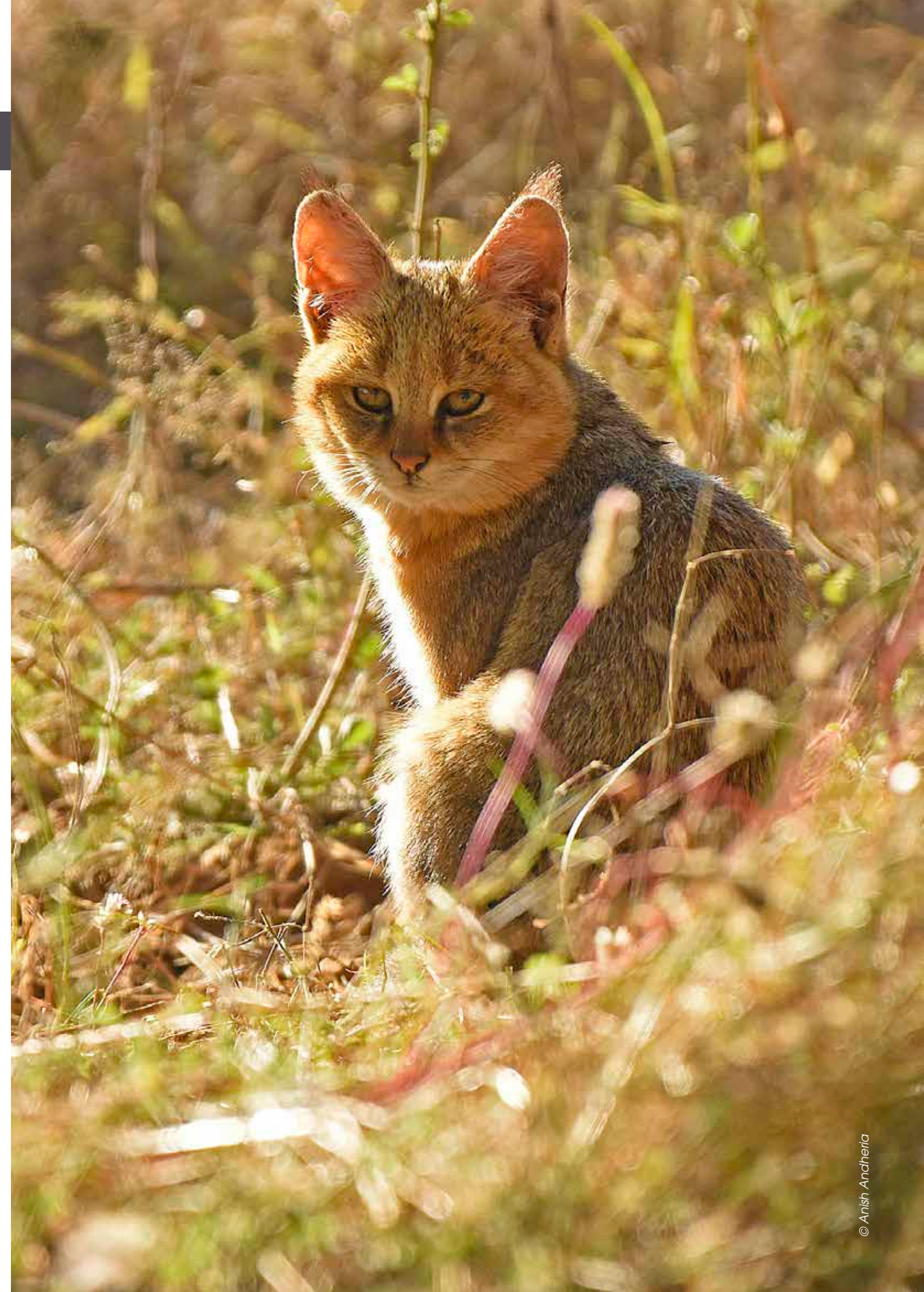


ABBREVIATIONS AND ACRONYMS	
ACF	Assistant Conservator of Forests
APC	Anti-poaching camp
CIL	Central Indian Landscape
CR	Conservation Reserve
EFI	Ecological Functionality Index
GTL	Greater Tadoba Landscape
GPS	Global Positioning System
GIS	Geographic Information System
HWI	Human-Wildlife Interface
IUCN	International Union for Conservation of Nature
MoEFCC	Ministry of Environment, Forests, and Climate Change
NCBS	National Centre for Biological Sciences
NH	National Highway
NP	National Park
NTCA	National Tiger Conservation Authority
PA	Protected Area
REAL	Riverine Ecosystems and Livelihoods
RFO	Range Forest Officer
TR	Tiger Reserve
VHF	Very high frequency
WLS	Wildlife Sanctuary



HIGHLIGHTS

- WCT collaborated with Dalberg to produce the '[Talking About Forests](#)' podcast series where eminent wildlife conservation, economics, and policy experts were invited to speak. WCT President Dr. Anish Andheria co-hosted the podcast episodes along with Mr. Nirat Bhatnagar, Partner, Dalberg.
- The Conservation Research team designed and fabricated pangolin transportation boxes. These boxes were provided to the key forest divisions where the frequency of pangolin rescue/confiscation was relatively higher. These boxes are being used regularly to transport rescued and confiscated pangolins safely, thereby reducing both stress and chances of injuries to these animals.
- The third-edition of the National-level Wildlife Protection Moot Court Competition in collaboration with the Government Law College, Mumbai, and the Initiative for Climate Action, Bengaluru, was organised. Eighteen teams, representing various prestigious law colleges from across the country, participated online (via Zoom) and presented their arguments on the theme of 'Compensation as a Means to Combat Human-Wildlife Conflict'. Senior Judges from the Bombay High Court presided over various rounds of the competition.
- The Android version of WCT's Wildlife Judgments Database app was launched and has now been made available on Google Play Store. WCT is working to ensure that this app is made available to forest staff across all the districts of Maharashtra, by working closely with the Forest Department. The goal is to make the curated repository of wildlife judgments easily accessible to the forest staff, helping them build strong cases.
- WCT launched a conservation awareness campaign called #TrappedInTrade, which was a result of a collaboration between the Communication & Outreach and the Combating Wildlife Crime teams during the National Wildlife Week in October 2021. The campaign created awareness regarding the urgent need for regulation of trade in exotic species in the country.
- WCT's Economist Pooja Dewoolkar was nominated as a Member of the Shortlisting Committee of SBI Youth for India fellowship.
- WCT's Conservation Psychologist Prachi Paranjpye delivered a talk on social science and psychology for conservation research at 'JWC Open Panel Discussion With Researchers'. She also conducted a session on using psychology for research and conservation research with the Psychology Department, Fergusson college, Pune.
- Dr. Anish Andheria was invited as a guest speaker on a podcast by SBI Foundation on the occasion of World Wildlife Day on March 3, 2022
- WCT's Communications and Outreach team produced and screened two short documentaries showcasing WCT's work. The film titled '[An Overview of our 360 Degree Approach](#)', giving a peek into all of WCT's projects, was screened on World Environment Day. '[Securing the Sahyadri-Konkan Corridor](#)', a film about WCT's efforts to monitor the presence and distribution of large carnivores in the corridor, and strengthening its protection, was screened on World Wildlife Day.



- WCT's Forensics expert C. Samyukta participated as a resource person in the two-day online Master Training Programme jointly organised by the Wildlife Crime Control Bureau and the Himachal Pradesh Police Training College, Kangra.
- C. Samyukta delivered a lecture on 'Evidence in Forest Offences: Collection and 'Appreciation' as part of the virtual Symposium on Forest & Wildlife Laws organised for Judicial Magistrates by the Madhya Pradesh State Judicial Academy. She also delivered a virtual lecture on 'Use of Forensics in Wildlife Crime Investigation and Overview of Latest Judgements' as part of the three-day online course on 'Investigation of Wildlife Offences' held by the Central Detective Training Institute, Ministry of Home Affairs, Government of India, for Police Officers from the rank of Sub Inspector to Deputy Superintendent from all over India.
- Girish Punjabi of WCT's Conservation Research team was the lead author on a scientific publication in the journal *PeerJ*, titled 'Methodological approaches for estimating populations of the endangered dhole *Cuon alpinus*'. This was a collaborative publication of scientists from WCT, University of Copenhagen in Denmark, King Mongkut's University of Technology in Thailand, Wildlife Conservation Society – India, and National Centre for Biological Sciences, India. The authors are members of the Dhole Working Group, part of IUCN's Canid Specialist Group.
- Girish Punjabi was invited by the Maharashtra Forest Department in March 2022 to train frontline staff of the Radhanagari Wildlife Sanctuary on carnivore and wildlife monitoring using camera-traps.
- In October 2021, Girish Punjabi was invited by the Biodiversity Cell at Symbiosis International University to give a talk to students on wildlife conservation in the Sahyadri landscape.
- WCT's conservation biologist Aditya Joshi co-authored a [field guide](#) for the rehabilitation of Indian pangolin published by the Central Zoo Authority.
- Aditya Joshi became a member of the IUCN SSC Pangolin Specialist Group.
- WCT's biologist Vivek Tumsare took a session on large carnivore monitoring for the M.Sc. students of the Institute of Environment Education and Research, Pune.

- Researchers Vivek Tumsare and Vikrant Jathar carried out training under the All India Tiger Estimation, exercise in Khandwa, Betul, Harda, North Balaghat, South Balaghat, South Seoni and North Seoni forest divisions, Madhya Pradesh.
- The Conservation Research team carried out camera trapping in corridor areas of southern Madhya Pradesh and the Chandrapur Forest Circle of Maharashtra under AITE.
- The Conservation Research team evaluated the camera trap models for the Pench TR, Madhya Pradesh, and Nagpur Forest Circle, Maharashtra.
- WCT's biologist Tarun Nair gave a guest lecture on Freshwater Ecology & Conservation for M.Sc. students of the Post-Graduate Programme in Wildlife Biology & Conservation, National Centre for Biological Sciences, Bangalore. He was also appointed as a co-supervisor for an M.Sc. student for a dissertation research project on crocodile behaviour and the human-crocodile relationship in, Charotar region of Gujarat.
- The Riverine Ecosystems and Livelihoods (REAL) programme was launched as a new WCT programme from April 2021,
- The REAL team conducted the first-ever survey of Ganges river dolphins in the Mahananda River in Bihar and West Bengal, which was the only unsurveyed river in India for the species until now.
- Dr. Nachiket Kelkar of the REAL team was nominated as a member of the Bihar State Board for Wildlife.
- Mr. Subhasis Dey of the REAL team was invited to be a Member of the IUCN Cetacean Specialist Group for his long-term work on river dolphin conservation and with fishing communities.
- Dr. Nachiket Kelkar and Tarun Nair of the REAL programme served as guest speakers at a capacity-building workshop on Integrating Fisheries Management into Wildlife Conservation in India's Gangetic plains, organised by WCT and the Department of Environment, Forests and Climate Change, Government of Bihar.





DEPARTMENTAL REPORTS

CONSERVATION RESEARCH

The work of this department aligns with the above UNSDGs.

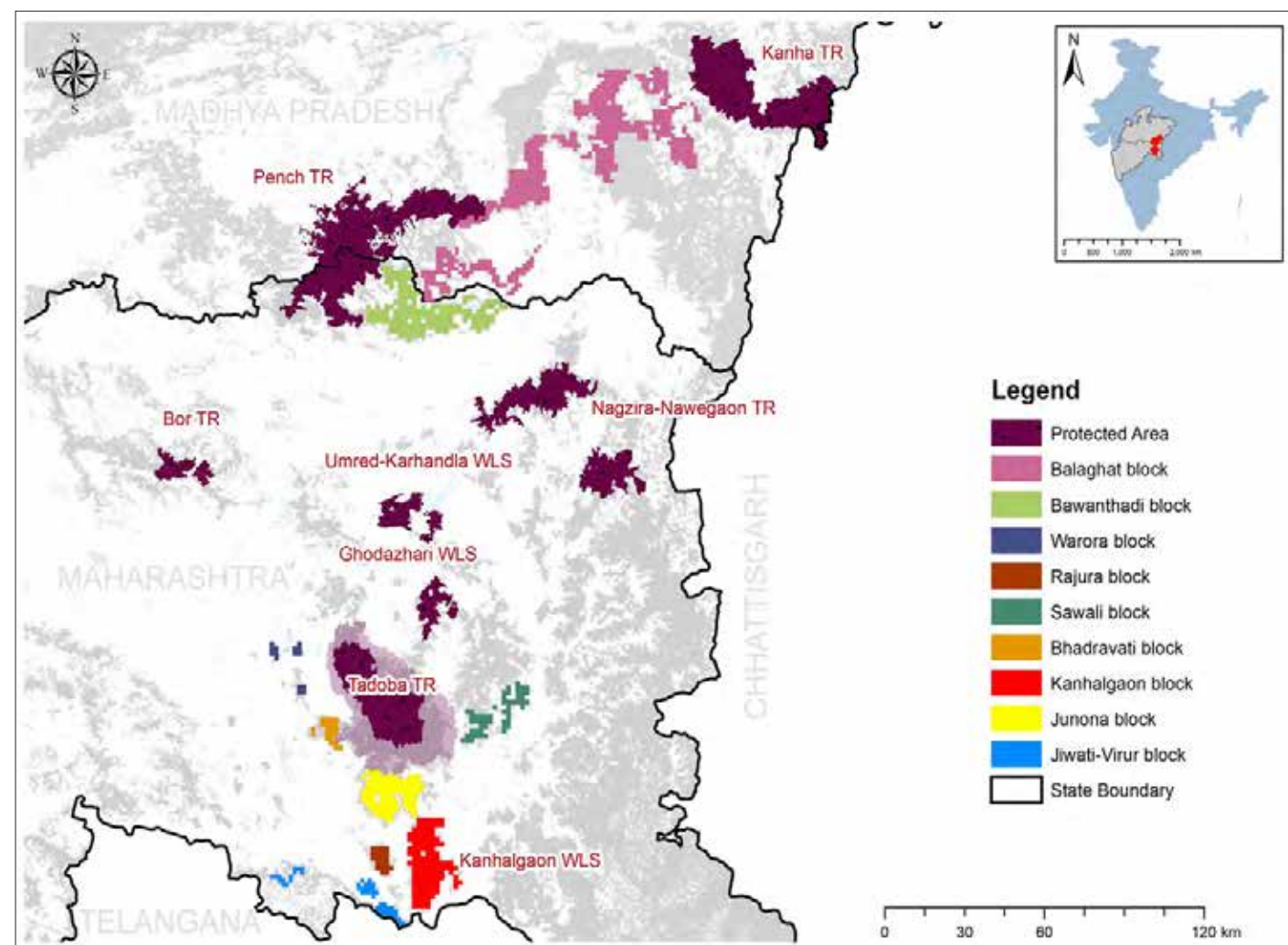
Currently, the programmes under this vertical are being implemented at three major sites across India – Central Indian Landscape (CIL), Western Ghats and rivers of Bihar. Each site has its own set of projects and field teams that look at various aspects of habitat and species protection. Moving forward, the Road Ecology division will be absorbed within the Conservation Research division.

THE CENTRAL INDIAN LANDSCAPE

I. Large Carnivore Monitoring Project:

The main objective of this project is to generate long-term spatial data on tiger densities and population dynamics in forest blocks outside PAs to influence the larger tiger conservation policy framework at the landscape and national levels. Another objective is to build the capacity of forest staff and other stakeholders in monitoring tiger populations outside PAs, and use this data for human-tiger conflict mitigation, planning mitigation measures for linear infrastructures and monitoring tiger dispersal events.

- The team carried out camera trap surveys in conjunction with the spatially explicit capture-recapture framework to monitor tiger populations in the forest blocks of Junona, Warora, Bhadravati, Sawali, Rajura, Jiwati-Wirur, Bawanthadi, Balaghat, and Kanhalgaon in Vidarbha, Maharashtra.



Map of the study area

- A total of 41 tiger scat samples were collected from forest blocks where camera trapping was carried out. Additional samples will be collected from areas where camera traps are still active. Once the camera trap sampling is over, the scat samples will be processed to conduct diet-analysis to understand the diet profile of tigers living outside PAs. This will also give us quality information regarding the dependence of these tigers on livestock.
- The field teams conducted training of the frontline forest staff while deploying camera traps in the field. The beat level field staff from the respective ranges were trained in the use of camera traps and the basic concepts of tiger monitoring. On-field sessions were conducted to explain the rationale behind camera trapping and other monitoring activities carried out with respect to large carnivores. While setting up the camera traps in the field, the frontline forest staff was trained on appropriate site selection and camera trap deployment for tiger monitoring. Additionally, GPS troubleshooting sessions were conducted for the staff to ease the usage of handheld GPS units in the field.
- The team embarked on a new project with a focus on securing a vital tiger corridor connecting the Melghat Tiger Reserve in Maharashtra with the Satpura Tiger Reserve in Madhya Pradesh. Out of the 200 Ground Control Points (GCP) ~180 points have been surveyed. The field team cumulatively covered 210 km. to reach these points. At each point the vegetation and terrain features were noted within a 50-meter diameter. To map the tiger habitat and identify key areas for tiger connectivity within this corridor, many features such as rivers, roads and human settlements were digitised and mapped.

II. Developing an ecology-based conservation strategy for the Indian Pangolin:

WCT aims at increasing the rate of successful rehabilitation of Indian pangolins in the wild by using ecological data collected from the radio-tagged wild and rehabilitated individuals. Using information from spatial, ecological and behavioural data from the tagged individuals, we want to identify key factors essential for pangolin survival. This will help in the selection of ideal sites for the release of confiscated/rescued pangolins and increase the success rate of rehabilitation.

- In all, the team has radio-tagged seven pangolins, two and five in the Satpura and Pench Tiger Reserves respectively, which are being monitored in the wild for their daily activity and site preference.

Pangolin	Sex	Type	Date	Site
Pangolin 1	Female	Rescued	2019	Satpura TR
Pangolin 2	Female	Confiscated	2019	Satpura TR
Pangolin 3	Female	Wild	2021	Pench TR
Pangolin 4	Female	Confiscated	2021	Pench TR
Pangolin 5	Female	Confiscated	2021	Pench TR
Pangolin 6	Female	Rescued	2021	Pench TR
Pangolin 7	Male	Wild	2022	Pench TR

- Camera traps have been installed on all the burrows used by these tagged pangolins to understand their activity and usage patterns. Data from camera traps also help us decipher the burrow visiting frequency for each pangolin in different habitat types.
- The team is continuing with its surveys with the help of WCT's conservation dogs in the Pench Tiger Reserve to map pangolin presence in the landscape. During the surveys, the team collected several pangolin scat samples, which will be used to determine the pangolin diet and for this, the team is currently exploring DNA metabarcoding techniques.
- All of the rehabilitated pangolins have settled down within the forest areas where they were released. The camera trap data have provided very rare insights into breeding, rearing, and parental behaviours of the Indian pangolin. Three of the radio-tagged pangolins have given birth. This is highly encouraging as successful breeding of released animals will have an overall positive impact on pangolin populations and will also help us understand the factors conducive for their breeding.



A radio tagged pangolin with her pup caught on camera trap



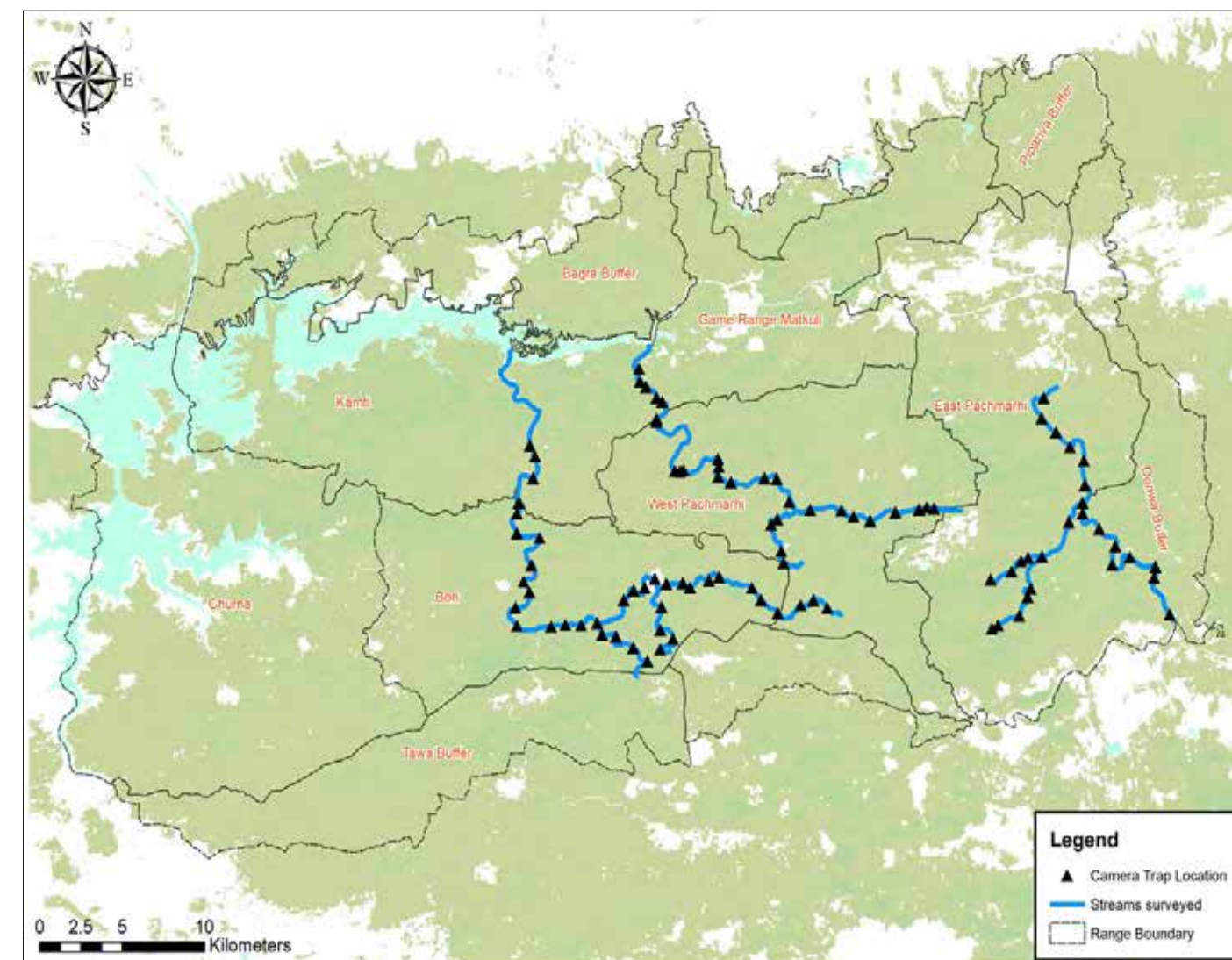
A pangolin shifted to the release site in a specially-designed transportation box

- Based on the field learnings, the team designed and fabricated pangolin transportation boxes. These boxes were provided to the key forest divisions where the frequency of pangolin rescue/confiscation was relatively higher. These boxes have been used extensively to safely transport pangolins, thereby reducing both stress and chances of injuries to the rescued/confiscated animals.

III. Assessing the forest-hydrological systems in a biodiversity hotspot: Satpura Landscape

Monitoring of rivers and reservoirs will help us understand the complexities of hydrological systems, which govern in-stream water availability and how it might affect the distribution of associated wildlife. This long-term dataset will help measure the influence of forest and other land-cover and land-use on stream hydrology and ecology. One of the main objectives of this project is to understand the current distribution of Eurasian and smooth-coated otters in relation to the status of perennial forest streams and water reservoirs. The distribution survey will form the first step towards identification of key areas of conservation and best practices for safeguarding these unique ecosystems.

- As part of the occupancy survey, three major rivers in the Satpura Tiger Reserve -- Denwa, Sonbhadra and Nagdwari -- were selected. These three rivers were divided into three kilometre segments, which were surveyed on foot to collect information on the availability of habitat and stream/river characteristics.
- Camera traps were placed in each of these segments to collect information on otter presence. The team walked a total of ~210 km. in a highly undulating terrain to survey ~140km of the river segments.



Map showing the surveyed rivers and camera trap locations

- Installation of Acoustic Water Level Recorders (WLRs) at multiple sites were completed to measure the changes in water levels in the streams. At each of these WLR sites, the team is manually mapping the stream profile and measuring the water flow velocities. This will allow us to calculate the volume of flow in the streams.
- Stream-gauging and water-quality monitoring are underway to understand the hydrological influences on otter occupancy and habitat use in the Satpura Tiger Reserve.
- The team also placed rain gauges within each water catchment area to precisely collect the rainfall data and correlate it with the dry season water flow from the streams/rivers of each of these catchments. This will provide information about how much water translates into surface flows and it will also throw light on the hydrological characteristics of the catchment.
- The team has designed an otter harness to fit a radio tag on the otter. Four trapping sites are being monitored for otter activity. Attempts for radio-tagging will be initiated in the coming months. Unfortunately, COVID-related delays have led to stretching of tagging deadlines.

THE WESTERN GHATS

Advancing Conservation Outcomes in the Sahyadri Landscape through Capacity Building and Management Planning

The present project builds upon a previous study which examined the status and change in distribution of four large carnivores (tiger, leopard, Asiatic wild dog, and sloth bear) in the Sahyadri-Konkan Landscape. The objective of the present project has been to improve the capacity of frontline forest staff of 11 Protected Areas that include eight newly-formed Conservation Reserves, in wildlife law enforcement and forensics, enhance staff safety and help in drafting of the State Forest Department's Management Plan for the northern Western Ghats corridor including several newly declared conservation reserves.

- WCT conducted a one-day capacity-building workshop on wildlife crime scene investigation for ACFs of Kolhapur Circle on November 22, 2021. The ACFs were from the Wildlife and Territorial Divisions of the Kolhapur Circle. Eleven ACFs from Sahyadri Tiger Reserve, Radhanagari Wildlife Sanctuary, and the Territorial Divisions of Sawantwadi, Kolhapur, Sangli, Satara, and Ratnagiri attended the workshop. The workshop was conducted by WCT's forensics expert C. Samyukta. ACFs were provided with training kits which included a book on Wildlife Law, a guidance booklet in Marathi, and a Forensics kit each.
- In January 2022, WCT conducted training workshops for staff of three Conservation Reserves in the southern end of the corridor – Chandgad, Tillari, and the Amboli-Dodamarg Conservation Reserves. A total of 57 staff members were trained during these workshops.
- WCT conducted six-days of intensive wildlife law enforcement training workshops in three batches for frontline staff of the Sahyadri Tiger Reserve in December 2021. The training was conducted by WCT's law enforcement expert Mr. Kiran Rahalkar. A total of 58 staff members attended the training programme. The sessions covered the fundamentals of the Wild Life (Protection) Act, 1972.
- In March 2022, training workshops on Law enforcement were conducted for staff of three Conservation Reserves – Vishalgad, Panhalgad and the proposed Gaganbawda Conservation Reserve. A total of 58 frontline forest staff members were trained during these workshops.

- WCT is assisting in the drafting of Management Plans for Tillari, Amboli-Dodamarg, Panhalgad, and Jor-Jambhli Conservation Reserves. The plans are with the state government and at various stages of finalisation. A Management Plan is a 10-year blueprint for each PA that allows systematic planning of protection activities, habitat management, and activities to benefit local communities through stream-lining of ecotourism. WCT is also helping the Forest Department in tiger monitoring using camera traps in Tillari and Chandgad. In addition, WCT has shared scientific inputs from the previous research study to help strengthen the corridor section of the Tiger Conservation Plan (TCP) of the Sahyadri Tiger Reserve.
- All-weather jackets were distributed among nearly 500 frontline forest staff members. This activity was aimed at providing the basic field gear to the frontline protectors whose job involves working round-the-clock in tough field conditions, many times braving heavy rain and low temperatures.



Project head Girish Punjabi checking a camera trap with the frontline forest staff of the Chandgad Conservation Reserve

RIVERS IN BIHAR

Riverine Ecosystems and Livelihoods (REAL) Programme

WCT started the REAL programme that is focused on research, policy, and conservation of India's riverine ecosystems, endangered riverine wildlife, and livelihoods of fishers in the Gangetic plains and central India. The programme currently looks at combining the goals of conservation of threatened riverine species, especially the Ganges river dolphin and the gharial on the one hand, and the sustainable and socially equitable management of riverine capture fisheries on the other.

Integrated management to secure coexistence of fisheries and wildlife in India needs creative thinking, interdisciplinary science, policy engagement, and problem-solving at many levels - legal, institutional, socio-economic, and ecological. Towards this objective, the REAL programme seeks to:

- 1) conduct long-term monitoring of population trends of threatened riverine species and capture fisheries production,
- 2) investigate the extent of and reasons for negative impacts of fishing activity on riverine species (especially bycatch mortality) and identify gaps in existing laws and policies,
- 3) assess the effects of large-scale hydro-climatic and socio-economic changes on water availability and use, and its impacts on freshwater species and fisheries,
- 4) build capacity among frontline forest staff to understand conservation challenges and opportunities from fisheries management, and
- 5) develop new knowledge products and test new conservation and management approaches grounded in interdisciplinary research and contribute to innovative policy thinking.

- The team completed surveys of the Ganga and Mahananda, and a section of the Gandak river in Bihar. The survey of Ganges river dolphins and other biodiversity in Mahananda was first-of-its-kind and the findings will go a long way in highlighting this ecosystem. Now, not a single river in India remains unsurveyed for the species. The team discovered a population of over 200 dolphins along the Mahananda River. This information was also included in the latest IUCN Red List assessment for Ganges river dolphins, co-authored by two members of WCT's REAL team.



© Soumen Bakshi

Ganges river dolphin (Platanista gangetica)

- The team conducted two capacity-building workshops: a) for frontline forest staff of eastern divisions of the Department of Environment, Forests, and Climate Change, Government of Bihar, and b) for a cluster of conservation organisations in Murshidabad, West Bengal. In connection with the workshops, we also developed a first-of-its kind manual describing fishing nets and gears of the Ganga river with special reference to the Vikramshila Gangetic Dolphin Sanctuary, which is now ready and will soon be disseminated to forest department offices across Bihar.
- The team amped up its spatial coverage of fisheries monitoring and Ganges river dolphin mortality detection to the Ganga river-floodplains in Bihar, to Jharkhand and West Bengal as well. The above work led to the submission of three reports to the Forest Departments of the Bihar and West Bengal and also contributed to four scientific publications.
- The REAL programme plans to enhance the impact of its surveys and studies by translating them into practical tools for management and policymaking by developing and disseminating policy analyses and frameworks to address issues such as bycatch mortality in fishing nets, legal gaps in wildlife and fisheries laws, and ecological flow provisions in dammed rivers.

King Cobras of the Western Himalayas: Nest Ecology & Conservation

This project involves assessment of the distribution and threats, and conservation of king cobras in the Kumaon region of Uttarakhand in northern India. WCT initially funded this project under its Small Grants Programme. The collaboration between the research team and WCT has since grown, and the study has been brought under WCT's Conservation Research umbrella.

- In 2021, the team monitored four king cobra nests from the Kumaon foothills, Uttarakhand. Unfortunately, eggs from three of these nests failed to hatch due to natural causes. However, despite these failures (at least from the point of view of conservation), the results gave valuable insights into the ecology and natural history of this enigmatic snake.
- The first nest was found in the last week of May, while it was still being built by a female king cobra. This gave the team an opportunity to observe and document the nest building process. All 16 eggs from this nest failed to hatch, probably because of poor nest construction.
- The second nest contained only eight eggs -- the lowest clutch size observed in the wild by the team. These eggs failed to hatch, probably because they were infertile.
- The third nest was located at 1,730 m. asl, the highest elevation at which a king cobra's nest has been found by the team so far. Unfortunately, all but one egg in this nest succumbed to lethally cold nest temperatures, presumably caused by an extreme weather event (i.e. unusually high rainfall over a two-day period in the 3rd week of October). However, one hatchling miraculously survived and hatched as late as November 1, providing key knowledge with regards to the thermal biology of this snake.
- The fourth nest, rather small in size, was ingeniously built by a female king cobra, who gathered a few pine and oak leaves into a pre-existing depression in the ground! This nest contained 24 eggs, all of which hatched successfully in late September.
- As part of the outreach component of this project, project lead Jignasu Dolia conducted 21 snake-awareness-cum-rescue training programmes for various stakeholders.



© Jignasu Dolia

A king cobra nest located 1,730 m. asl, the highest elevation at which a king cobra's nest has been found by the team so far

CONSERVATION BEHAVIOUR

The work of this department aligns with the above UNSDGs.

The Conservation Behaviour vertical focuses on developing a data-driven understanding of inclusivity, inequity and incentives that impact conservation. It uses this understanding to strengthen institutions of governance, thus facilitating long-term improvements in conservation outcomes. At a national level the **Fiscal Principles Project** aims to include diverse ecosystems and communities as recipients of the Forest and Ecology grant of the Finance Commission.

In the Chandrapur District of Maharashtra the team has reached more than 2,500 households through the **Heater of Hope Project**, saving more than five tonnes of carbon emissions annually. This has now been adopted as a part of the Shyama Prasad Jan-Van Vikas Yojana in Chandrapur. At the same time, the team facilitated the expansion of the Shyama Prasad Jan-Van Vikas Yojana to more than 100 conflict-prone villages in Chandrapur by using AI for predicting conflict hotspots. This was a part of the **‘Facilitating Human-Wildlife Coexistence through Conflict Prediction’** initiative in collaboration with the Google AI for Social Good programme.

In addition, the Madhya Pradesh Forest Department Working Plan office invited the team to conduct a study and give recommendations to enhance the psychological wellbeing of forest staff at the Nauradehi Wildlife Sanctuary. The Principal Chief Conservator of Forests (Wild Life), Madhya Pradesh, has urged all the senior officers to take immediate action on the recommendations for improving the wellbeing of the frontline forest staff.

Heater of Hope Project

The project is implemented in the Bramhapuri Forest Division in Chandrapur District, Maharashtra. The ~1,200 sq. km. area of Bramhapuri Forest Division is one of the most important forest blocks outside the Protected Area network from the perspective of tiger conservation in the CIL. In a first-of-its-kind study, WCT collected granular household-level data on socio-economic and psycho-social drivers that lead to firewood extraction for more than 8,000 households around Chandrapur. The data shows a widespread distribution of Liquid Petroleum Gas (LPG) cylinders in the project villages in Chandrapur district. While this intervention exclusively addresses the cooking fuel needs of the households, it is unable to replace the fuelwood usage in meeting their daily requirement for hot water. This has led to continued usage and dependence on fuelwood. The provision of an efficient, sustainable, and affordable biomass-fuelled water heater (or *bumbb* as it is called in Marathi language) was made to address this need of the households and ensure their transition to cleaner fuel usage for all their water heating energy needs.

- The success of the pilot programme and overwhelming response from the villages also led to the inclusion of the water heater in the Shyama Prasad Mukherjee Yojana of the Maharashtra Government. Maharashtra Forest Department has agreed to a district-wide scale up to include 200 villages. As a result, an additional 1,033 households have received the water heater with the help of the Maharashtra Forest Department.
- Currently 2,089 households have received the water heater under the project.
- The impact of the project can be classified into benefits for the households that have adopted the sustainable water heater, and policy level changes acknowledging water heating needs of the household. Some of the main benefits are listed below:

o Lesser Human-Wildlife Interaction

Reduces visits to the forest by 30 percent per year thus reducing the risk of negative interactions with wildlife.

o Better Health

Reduced exposure to smoke for women by eliminating the need to blow air as is required in a traditional cooking stove. Reduces firewood consumption by at least 70 per cent.

o Carbon Saving

Estimated 1.5 tonnes of CO² emissions reduced per year per household. Estimated 3,133 tonnes of CO² emissions reduced per year per 2,089 households. This is equivalent to CO² pollution created by 3,133 cars in a year (assuming that a typical car produces an average of one metric tonne of CO² per year in India).

- Increased outreach efforts have ensured that information about the water heater reaches all sections of the rural society, despite the caste and class barriers. This is reflected through the equal representation in water heater adoption across income groups.
- The Maharashtra Forest Department has invited the WCT team to conduct demonstrations in more than 40 villages which are expected to receive the water heater in the near future.



© Anish Andheria

A Ghodazari village resident uses a sustainable water heater or bumbb as an alternative to burning firewood to heat water

Fiscal Principles Project

In India, current policies implemented by the Finance Commission marks devolution of funds based on forest cover. There is no incentive for any state government, local bodies, communities, and individuals to conserve other equally critical ecosystems such as grasslands, wetlands, deserts, coral reefs and other marine ecosystems. If replaced by a more holistic index based on ecosystems functionality, it would incentivise different states to protect other ecosystems apart from forests. WCT has undertaken a unique flagship project titled 'Fiscal Principles: An Impetus for Natural Capital'. Through this project, we will provide evidence-based and scientifically robust policy recommendations to the Finance Commission on fund devolution that incentivises environmental protection and promotes it as an allied objective.



Map depicting the main project sites

- Currently, data for more than 4,000 households in the Sahyadri and Satpura Tiger Reserves has been collected.
- The primary data collection process has commenced at three sites including the Desert National Park in Jaisalmer. This is preceded by collecting census data.

- Secondary data for State-wise Land Use Land Cover was collected which will be used to create projections of devolved funds to each state.
- The review and analysis of existing efforts towards the grant has been captured through a working paper series. The working papers were the building blocks for developing a key discussion paper titled 'An Alternative Criteria for Devolution: Looking Back to Move Ahead' that has now been completed. This policy discussion paper computes an EFI and projects the allocation to various states.
- The team has conceptualised an adoptable Ecological Functionality Index (EFI) and a framework for its creation. Secondary data for State-wise Land Use Land Cover was collected which will be used to create projections of devolved funds to each state.



The team conducting primary data collection in Desert National Park

Preventing Human-Wildlife Conflict using AI

- The team participated in the development of AI-based predictive models for human-wildlife conflict in collaboration with Google AI for Social Good programme. They produced a short report on conflict and related human behaviours.
- The team presented the project to the Chief Conservator of Forests, Chandrapur, and consequently, was granted permission to access historical data and collect primary data.
- Primary data was collected on incidences of herbivore attacks on farms between October and December 2020 for a cluster of seven villages. This will be used by our partners Google AI for Social Good and Singapore Management University to test the field accuracy of the AI-based models.
- The predictive models identified future conflict hotspots. Villages around them were identified as sensitive villages. This facilitated the expansion of the Shyama Prasad Mukherjee Jan Van Vikas Yojana to more than 100 villages in the district.
- Additional grant of Rs.25 lakhs will be provided to each of these villages for conflict mitigation and development activities. These funds will also allow for the provision of Heater of the Hope in these villages.

Work Motivation of Forest Guards

Forest Guards work in a challenging and stressful work environment. Understanding the factors that affect their work motivation is essential to have more effective work performance of the forest guards. WCT has conducted psychological surveys of forest guards to understand their wellbeing, work motivation and their association with their work in 11 tiger reserves from Maharashtra and Madhya Pradesh.

- This year the team was called for a survey by the Nauradehi Wildlife Sanctuary planning officer, where it conducted work motivation surveys of forest guards.
- The report and the recommendations of the survey were submitted to the Madhya Pradesh Forest Department. The department issued a letter recommending the tiger reserves and important PAs in the state to take steps as per the recommendations.

ROAD ECOLOGY

The work of this department aligns with the above UNSDGs.

Linear infrastructure projects, like roads and railways are among the largest man-made structures on the planet. Widening of roads, construction of new roads, enhancing railway network, building of new canals, etc. endanger the lives of several animal species. Further, linear infrastructures, which pass or cut through forests, sever vital wildlife corridors, thereby isolating animal populations and eventually, leading to local extinctions. WCT’s Road Ecology division studies linear infrastructure projects and undertakes policy-level interventions for the creation of mitigation measures needed to minimise damage to wildlife from such projects.

Generating Baseline Data on Animal Movement and Usage Along Linear Infrastructure

- Multiple road development projects that are planned cut through corridors connecting Tadoba-Andhari Tiger Reserve to other tiger habitats. Such large-scale development of linear infrastructure without a plan to maintain connectivity would have ended up isolating tiger and other wildlife populations. Although road expansion work is yet to begin the team continued camera trapping on the Chandrapur-Mul Road, NH-930, to document the animal presence and movement across the road. This study will provide a valuable baseline for future comparison and to assess the effectiveness of mitigation structures in the TATR landscape.
- Similarly, animal Sign-Survey along the Gondia-Kohmara Road (proposed four lane) between Navegaon-Nagzira Tiger Reserve was carried out by the team.

Understanding Animal Usage Along Mitigation Structures

- The team continued monitoring and analysing the usage of mitigation structures built along the Gondia-Jabalpur and Balaghat-Nainpur Railway in the Balaghat District.
- The team also completed a preliminary camera trap survey of mitigation structures that were recently constructed on the National Highway 44 (NH-44) within the Kahna – Pench tiger corridor in the state of Madhya Pradesh. Preliminary results of animal use of wildlife structures along NH-44, indicate that larger structures support higher usage by a larger number of species when compared to smaller structures.
- Additionally, the team also explored the feasibility of studying mitigation structures built across the Gosekhurd (Bramhapuri) Canal. The construction of large canals to supply water is an emerging threat in addition to the already existing linear infrastructure in the Central Indian Landscape. A systematic assessment of such large-scale irrigation canals should be carried out to understand its impacts on wildlife movement and connectivity.



© WCT



© Anish Andheria

A tiger captured on camera trap (left) using the underpass structure on the NH-44 along the Kanha-Pench Corridor.
Tiger pugmarks (above) observed in the underpass

HUMAN-WILDLIFE INTERFACE MANAGEMENT

The work of this department aligns with the above UNSDGs.

The Human-Wildlife Interface Management division of WCT studies different types of interactions between humans and wildlife, and provides technical assistance to the Forest Department in dealing with negative or potentially negative human-carnivore interactions. Whereas, the livestock-wildlife disease interface component employs a strategy of long-term surveillance of diseases at the human-livestock-wildlife interface.

Rescue, Rehabilitation, and Release of Injured/Orphaned/Distressed Wildlife

WCT along with the Forest Department worked on the rehabilitation and release of tigers in the wild. A young male and a female tiger were radio-collared and released in the Sanjay Dubri Tiger Reserve. A young rescued female is undergoing rehabilitation in the Bandhavgarh Tiger Reserve and will be released back into the wild as soon as her recovery is found to be satisfactory.

Month	Species	Animal History	Intervention	Protected Area	Outcome
April 2021	Tiger	Injury/distress	Immobilised and treated	Bandhavgarh Tiger Reserve	Tiger succumbed to injuries
May 2021	Tiger	Injury/distress	Immobilised and treated	Satpura Tiger Reserve	Tiger relocated to Van Vihar National Park
June 2021	Tiger	Rehabilitation	Capture, collaring & Translocation	Bandhavgarh Tiger Reserve	Tiger translocated to Sanjay Dubri Tiger Reserve
July 2021	Sloth Bear	Injury/Distress	Immobilised and treated	Annupur Forest Division	Sloth Bear succumbed to injuries
Sep 2021	Tiger	Human-tiger interface management	Capture and Translocation	Satpura Tiger Reserve	Tiger released in Satpura Tiger Reserve
Dec 2021	Tiger	Rehabilitation	Capture, collaring & Translocation	Bandhavgarh Tiger Reserve	Tiger translocated to Sanjay Tiger Reserve
Dec 2021	Leopard	Injury/distress	Immobilised and treated	Betul Forest Division	Leopard transferred to Van Vihar National Park
March 2022	Sloth Bear	Trapped	Immobilised and Released	Ratapani Wildlife Sanctuary	Released in Ratapani Wildlife Sanctuary

Interventions involving wildlife rescue, capture, translocation and rehabilitation that WCT assisted the Forest Department with



WCT and Forest Department veterinarians monitoring the an anaesthetised tiger in the Satpura Tiger Reserve

Wildlife-Livestock Disease Interface Management

- The disease surveillance programme was carried out at the wildlife-livestock interface in Sanjay Dubri Tiger Reserve. Whole blood samples were actively collected for screening the livestock population for Foot and Mouth Disease (FMD) and Bovine Tuberculosis (bTB).

Details of samples collected:

Purpose	Number of samples
Sero-surveillance (pre-vaccination) of FMD	624 (Cattle:325; Buffalo:63; Goat:236)
Sero-surveillance (post-vaccination) of FMD	402 (Cattle:253; Buffalo:39; Goat:110)
Oro-pharangeal fluid Samples for detection of FMDV	27 (Cattle:18; Buffalo:5; Goat:4)
Screening of Herds for bTB	38 herds



Processing of oropharyngeal fluid sample for storage

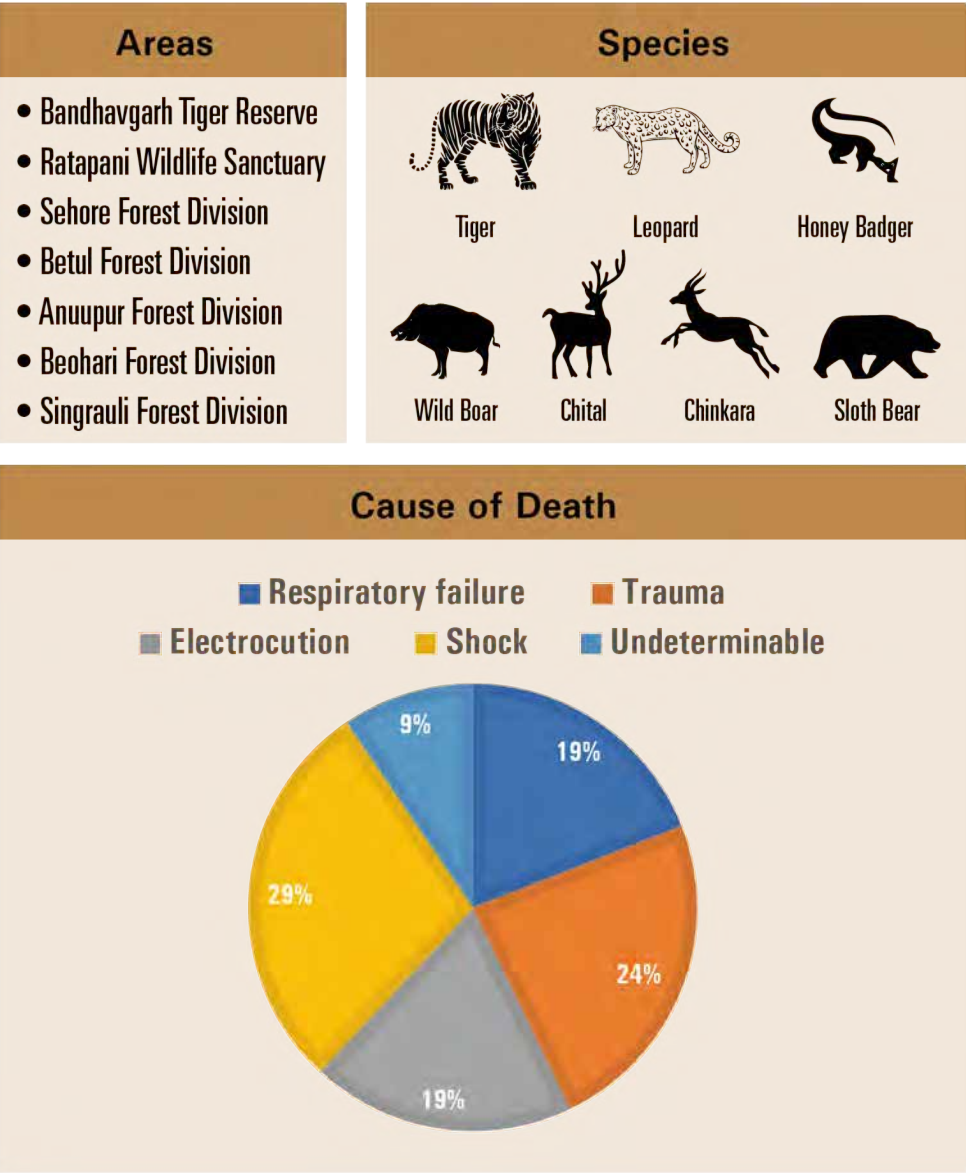
© WCT

- For the purpose of relationship building and generating awareness prior to vaccination, the team with the Madhya Pradesh Forest Department and the Animal Husbandry Department operated veterinary ambulatory clinics and organised livestock camps for distribution of deworming medications, multivitamin supplements, and ectoparasiticides at the Sanjay Dubri Tiger Reserve.
- During these livestock health camps, livestock owners were advised on good practices in animal husbandry and importance of vaccination. A total of 18 livestock camps were organised. These were attended by 460 animal owners that benefitted 4,801 livestock. Medications and supplements were also distributed to individual households during sample collection. In the course of this exercise, the team reached out to 963 households in 51 villages to accomplish the sample collection process.
- WCT coordinated with the Madhya Pradesh Forest Department and Animal Husbandry Department to facilitate vaccination drives in core and buffer villages of Sanjay Dubri and Bandhavgarh Tiger Reserves. The strategy involved joint consultations, planning, and execution with personnel from the Forest Department, Animal Husbandry Department, and WCT. The emphasis of the vaccination programme was on maintaining a cold chain, proper distribution, and administration of vaccines to prevent vaccination failures in livestock.
- During 2021-2022, 50 each of pre and post vaccination serum samples were collected and tested to analyse herd immunity and level of seroconversion at Sanjay Dubri Tiger Reserve. During the first round (2021-2022) of vaccination, the protective titre in pre vac samples ranged from 4-44 percent and in post vac samples it improved and ranged from 74-78 percent. The increase in protective titre after the round of vaccination indicates a positive impact of the intervention.

Protected Area	Number of Villages	Livestock Vaccinated	Total Livestock	% Livestock Vaccinated
Bandhavgarh Tiger Reserve	90	34069	74885	45.5
Sanjay Tiger Reserve	89	22013	67464	32.6
Bagdara Wildlife Sanctuary	10	5205	12009	43.3

Wildlife Mortality Investigation

WCT veterinarians are routinely called upon to investigate wildlife mortalities in Madhya Pradesh. In the year 2021-2022, under this project, 21 incidences of wildlife mortality were attended to and investigated by WCT veterinarians. They are listed as below:



CONSERVATION DOGS UNIT

The work of this department aligns with the above UNSDGs.

The Conservation Dogs Unit (CDU) provides services across a range of conservation projects including the pangolin ecology and linear infrastructure mitigation projects. The team also assists Forest Departments in snare detection and human-wildlife conflict management. In the short time since it first became operational, the CDU, comprising four highly trained dogs and qualified trainers, has become an integral part of WCT's conservation strategy. This is a unique programme as it harnesses the canines' supreme olfactory abilities and productively channels the age-old human-dog relationship to further conservation outcomes.

- The CDU conducted several operations and recce tours this year in various human-wildlife conflict sites in and around Sanjay Dubri Tiger Reserve, Panna Tiger Reserve, Nauradehi and Ratapani Wildlife Sanctuaries in Madhya Pradesh; and Sahyadri Tiger Reserve, Amboli and Panhala Conservation Reserves in the Western Ghats along with some other sites around Nashik and Pune.
- Two specially trained conservation dogs were deployed by WCT's Conservation Research team in Satpura and Pench Tiger Reserves to assist the field biologists in detecting Indian pangolins which are rare, shy, elusive and difficult-to-detect animals. The keen olfactory sense of the canines helped in detecting pangolin burrows, tracks and other signs such as scat and feeding sites.
- Regular intensive training and upkeep of the conservation dogs is an integral part of the project. A strict regime of physical and mental exercises has been established. The team has designed several drills to keep them motivated and mentally stimulated.
- Two of our conservation dogs are trained to track injured animals, or animals that have entered human-dominated spaces. The CDU has assisted the Forest Department in several such conflict situations across the state of Maharashtra. The use of trained dogs works like a force multiplier and it increases the efficiency of the team. It also reduces the time required to survey a certain area thus helping the management immensely. WCT's mobile kennel vehicle also plays a vital role in the quick deployment of the CDU field team.



The Conservation Dogs Unit taking a break during an animal tracking assignment

© Nihad Bhosale/WCT

The wire snare trap is the most widespread method used by poachers to kill wildlife. Though passive, it is a deadly trapping technique and causes countless animal deaths each year. The snares are well camouflaged and are difficult to spot. The team has trained the conservation dogs in detecting snares under difficult field conditions.

The team conducted recce at Ratapani Wildlife Sanctuary and Panna Tiger Reserve. The initial trials have proved promising and the dogs are able to detect snares as well as carcasses of animals trapped in snares. This will help to increase the efficiency of law enforcement mechanism and will also prove to be a deterrent to poachers in the long run. Looking ahead, we are working on some predictive modelling to narrow down on specific sites for conducting focused detection drives rather than scanning the entire landscape, which is often both resource heavy and time consuming.



The Conservation Dogs Unit assisting the Forest Department with in a human-wildlife conflict situation

© WCT

COMBATTING WILDLIFE CRIME

The work of this department aligns with the above UNSDGs.

In recognition of and in response to the grievous issue of Illegal Wildlife Trade (IWT) and other wildlife offences that threaten the survival of wildlife, the recent evidence linking the coronavirus pandemic to illegal wildlife trade, and the growing global efforts against wildlife crime, WCT has been carrying out the 'Combatting Wildlife Crime' (CWC) Programme. In the coming years, we seek to use this programme as a vehicle to create capacity for improved investigation of wildlife crime, increased conviction rate of wildlife criminals, and greater protection of highly endangered carnivores and prey populations across India's forests.

WILDLIFE LAW ENFORCEMENT TRAINING (WLET)

- A total of 1,390 frontline forest staff were trained across Maharashtra, Madhya Pradesh and Bihar in FY 2021-22:
 - The wildlife law enforcement training programmes were organised in Sahyadri, Panna and Sanjay-Dubri Tiger Reserves. The team conducted training programmes for frontline forest staff across multiple wildlife divisions of Madhya Pradesh, where they were equipped with knowledge about crime scene investigation and case paper preparation amongst others.
 - The team continued to conduct training in Forest Training Institutes (FTIs) of Maharashtra. This programme was targeted at forest guards undergoing six-month induction training at these institutes.
 - The team conducted training programmes for forest staff at the newly declared Conservation Reserves across the Northern Western Ghats as part of the long-term capacity building initiative in the region.
 - The team also conducted special training for the forest officers at Vikramshila Gangetic Dolphin Wildlife Sanctuary in Bihar. This was part of our ongoing initiative under the Riverine Ecosystems & Livelihoods (REAL) programme that aims to conduct long-term monitoring and capacity building of forest staff across the range of Ganges river dolphin, India's national aquatic animal.

WILDLIFE FORENSICS

- The team conducted training on evidence collection and crime scene investigation for over 400 frontline forest staff from across four parks in Madhya Pradesh, viz. Ratapani & Nauradehi Wildlife Sanctuaries and Panna and Sanjay-Dubri Tiger Reserves. It also conducted this training for over 300 frontline forest staff from seven wildlife divisions across Madhya Pradesh, viz. Barghat-Seoni, East Mandla, West Mandla, South Seoni, Kundam, Mohgaon, and Siddhi-Rewa divisions.
- The team organised a specialised training on forensics for mid-level forest officers (RFOs, ACFs & DFOs). This was held at and in collaboration with the National Forensic Sciences University (NFSU), Gandhinagar. A total of 22 officers from various PAs in Madhya Pradesh participated in this three-day training programme and were exposed to the latest techniques and technology in wildlife crime investigation using forensics.
- The team organised and conducted a specialised training programme on wildlife crime and its investigation for judicial officers from the state of Madhya Pradesh. This two-day programme was held at and in collaboration with the Madhya Pradesh State Judicial Academy (MSPJA); and comprised lectures by experts from across the State Forest Department, MPSJA and WCT. It was attended by over 40 judges from various regions of the state that are close to forest areas and have a high incidence of wildlife offences.
- The Forensics team further organised the third-edition of the National-level Wildlife Protection Moot Court Competition in collaboration with the Government Law College, Mumbai, and the Initiative for Climate Action, Bengaluru. In all 18 teams, representing various prestigious law colleges from across the country, participated online (via Zoom) and presented their arguments on the theme of 'Compensation as a

Means to Combat Human-Wildlife Conflict'. Senior Judges from the Bombay High Court presided over various rounds of the competition.

Other training programmes:

WCT's Forensics expert, C. Samyukta -

- Participated as a resource person in the two-day online Master Training Programme programme jointly organised by the Wildlife Crime Control Bureau (WCCB) and the Himachal Pradesh Police Training College, Kangra. She provided training on the topic of 'Wildlife Forensics, Crime Scene Management, Collection and Preservation of Evidence' to over 20 Police officers of the ranks of Assistant Sub-Inspector, Sub-Inspector, Inspector, and Deputy Superintendent of Himachal Pradesh.
- Delivered a lecture on 'Evidence in Forest Offences: Collection and Appreciation as part of the virtual Symposium on Forest & Wildlife Laws organised for Judicial Magistrates by the Madhya Pradesh State Judicial Academy.
- Delivered a lecture on 'Marine Illegal Wildlife Trade' as part of the wildlife week webinar titled 'Marine Wildlife Conservation – when Science becomes Forensic' organised by the Advanced Institute of Wildlife Conservation (AIWC), Vandalur, Tamil Nadu.
- Delivered a virtual lecture on 'Use of Forensics in Wildlife Crime Investigation and Overview of Latest Judgements' as part of the three-day online course on 'Investigation of Wildlife Offences' held by the Central Detective Training Institute, Ministry of Home Affairs, Government of India, for Police Officers from the rank of Sub Inspector to Deputy Superintendent from all over India.
- Delivered virtual guest lectures for the students of Department of Zoology, St. Xavier's College, Mumbai, on 'Wildlife Forensics and CITES and other Wildlife Legislation'. Also, delivered a virtual guest lecture on 'Wildlife Forensics using Botanical Samples' for the students of the Institute of Road Traffic Education (IRTE), Faridabad.
- Conducted a virtual Masterclass on Wildlife Forensics for the International Institute of Forensic & Security Studies, Lucknow. Participants came from different backgrounds, including retired police and forest officers, practicing lawyers, and students.



A workshop on Wildlife Crime Scene Investigation Using Forensics held for the forest staff in Madhya Pradesh

HEALTH

The work of this department aligns with the above UNSDGs.

Caring for Conservators – Preventive Health Check-ups for Forest Staff

- Preventive health check-ups were conducted in five PAs which included Umred-Pauni-Karhandla Wildlife Sanctuary, Pench, Bor, Navegaon-Nagzira Tiger Reserves in Maharashtra, and Satpura Tiger Reserve in Madhya Pradesh.
- A total of 398 forest staff members were assessed for their risk of cardiovascular disease and oral health. Of those, 253 members underwent telephonic follow-up two weeks after the check-ups. The health check-up results were shared with the forest staff through a ‘Health Passbook’. Consolidated reports of each PA were shared with the respective forest departments.



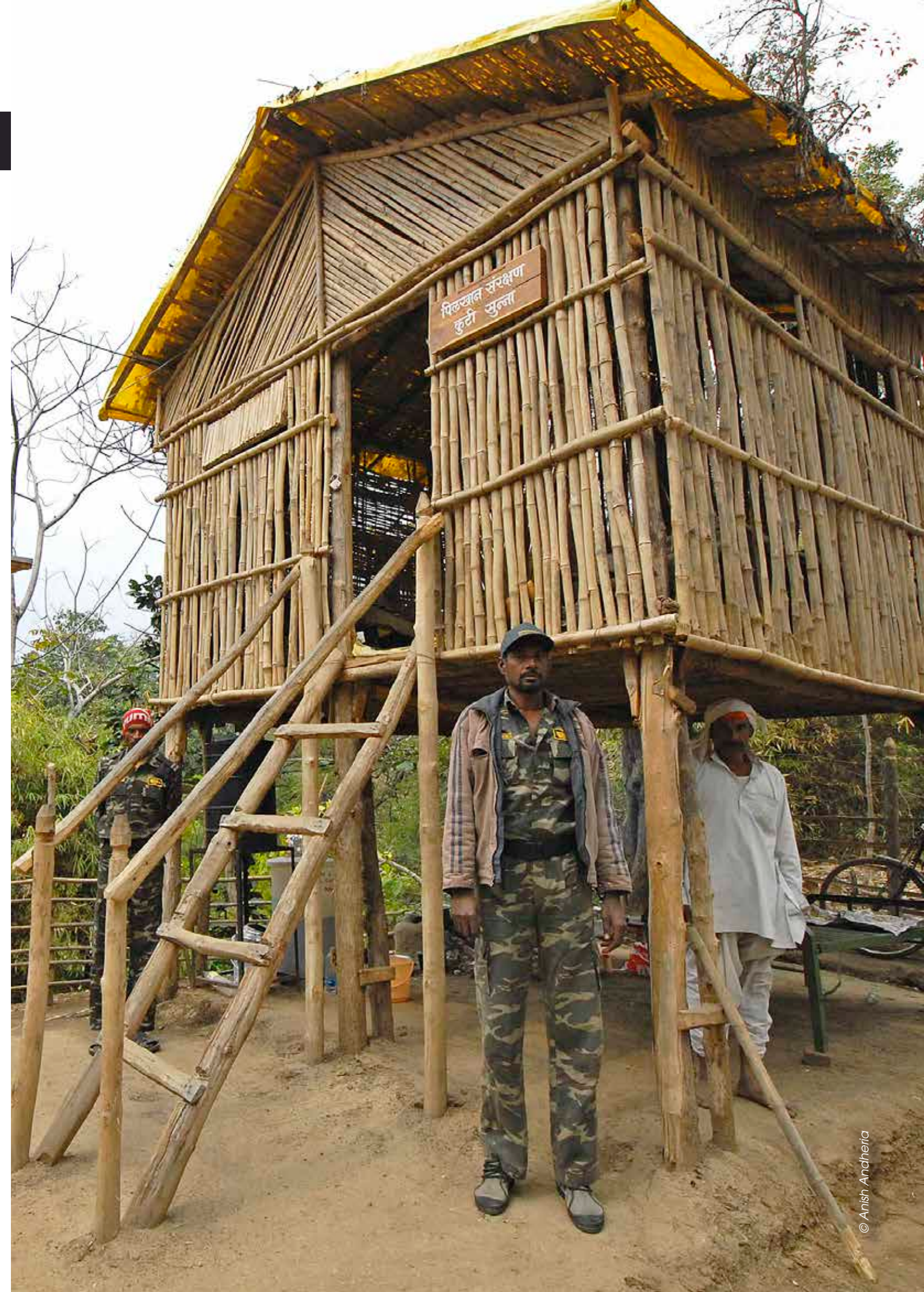
WCT’s medical officer hands over a health passbook to a forest staff member

Van Aarogya App

- Development of a first-of-its kind android mobile phone application dedicated towards improving forest staff’s access to information regarding health and safety is underway and is in the final stages of testing.
- The Vann Aarogya App will be made multi-functional and interactive by combining inputs from previous and ongoing health interventions. This would help provide the forest staff with access to training resources, health information, and signposts to the nearest available healthcare facilities at their fingertips, while also allowing them to contribute to the compilation of data on their health risks and challenges.
- The team spoke to 368 forest staff members from five PAs where preventive health checks were conducted, to seek additional information on their access to healthcare.

ECHO Network

- The team has been central in engaging with the ECHO network, which is a Government of India initiative with an aim ‘To build a close-knit and collaborative community where bright minds can tackle real-world problems in the human and environmental ecosystem’. WCT has been involved as a key stakeholder in developing health projects at the human and wildlife interface, and will continue to collaborate with this network to promote its work around One Health.



COMMUNICATION & OUTREACH

The past three years (2019-2022) have marked the strengthening and scaling up of WCT’s communication and outreach efforts. The team has undertaken several key projects, including important awareness activities; organising and assisting other teams for events; producing written and video content; authoring articles for leading wildlife publications, and producing documentaries about various WCT projects. The team has significantly increased WCT’s following among new and diverse audiences, through unilateral and collaborative efforts. WCT’s social media platforms and website are now being used to amplify the organisation’s conservation projects as well as to dissipate knowledge and create awareness on natural history, wildlife, and key conservation issues.

Collaborations

- The team collaborated with Green Hub for Earth Day 2021 for a special online wildlife film screening event in which three films made by Green Hub fellows were showcased on WCT’s online channels.
- The team assisted in organising the 3rd edition of the ‘Wildlife Protection Government Law College National Online Moot Court Competition’ in association with the Government Law College (GLC), Mumbai, and Initiative for Climate Action (ICA).
- The team collaborated with Dalberg to produce the ‘Talking About Forests’ podcast series. WCT President Dr. Anish Andheria co-hosted the podcast episodes.
- The team collaborated with the Global Rewilding Alliance on Animating the Carbon Cycle webinar to celebrate the UN Decade of Ecosystem Restoration.
- WCT partnered with Balipara Foundation for the 9th edition of Eastern Himalayan Naturenomics™ Forum, 2021.



‘Talking About Forests’ podcast poster

Social media activities

- The team organised an online roundtable conversation on YouTube with WCT Experts Girish Punjabi, Sheetal Kolhe, Aditya Joshi and Dr. Anish Andheria on ‘Connectivity and Corridors’ on the occasion of International Tiger Day 2021.
- The team organised an online short film screening event in January 2022, where it showcased four impactful wildlife and conservation films made by young, talented wildlife filmmakers to spread awareness and sensitise people about environmental, conservation and climate issues.
- The team launched the #AskMeAnything video sessions with WCT President Dr. Anish Andheria on Instagram where people’s conservation and wildlife-related questions were answered.
- WCT’s Social Media statistics for the reporting period

Social Media	April 1, 2021	March 31, 2022	% increase in followers
Instagram	17,768	20,887	17.55
Twitter	9,083	10,578	16.46
Facebook	22,257	22,601	1.55
LinkedIn	36,416	54,007	48.31

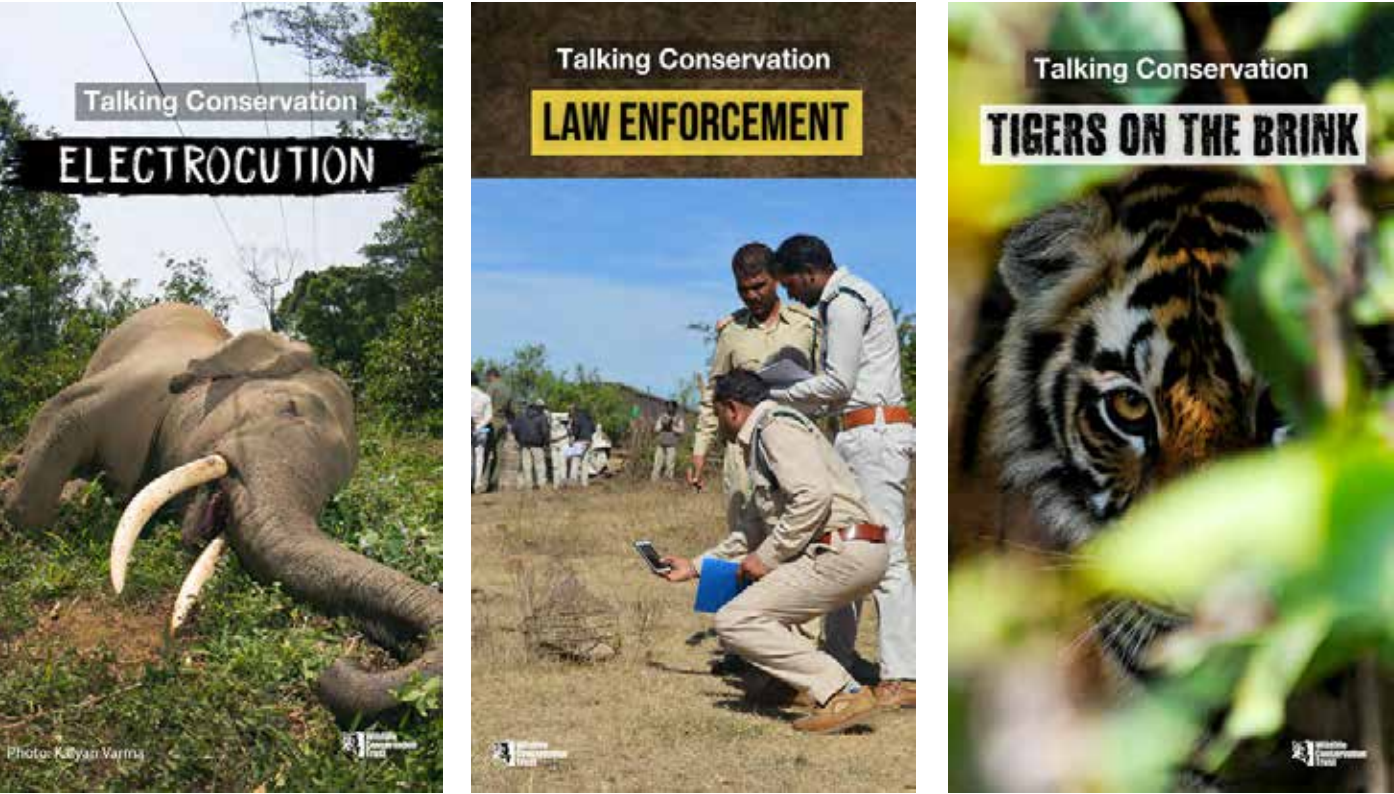
Films/ Videos

- The team produced and screened two short feature documentaries showcasing WCT’s work. ‘An Overview of our 360 Degree Approach’ was screened on the World Environment Day and ‘Securing the Sahyadri-Konkan Corridor’, a film about WCT’s efforts to monitor the presence and distribution of large carnivores in the northern Western Ghats, was screened on the World Wildlife Day.



A WCT film poster

- The team produced 37 videos for WCT’s social media channels including a video on ‘World Health Day’ explaining the concept of One Health; a short film on ‘World Day for Safety and Health at Work’, followed by insights on WCT’s trauma training programme; and informative videos on World Sea Turtle day, World Lion Day and World Ranger Day to name a few.
- A documentary comprising a field interview of WCT’s Conservation Researcher Girish Punjabi, was made to highlight the importance and conservation challenges of the northern Western Ghats and its large carnivores.



Some of the video reels produced by the team

- The team continued producing short educational videos in the popular Instagram Reels format. The ‘Talking Conservation’ Reel series launched last year was continued, and a new series titled ‘The Ocean and our Climate’ was also launched.
- Twenty nine Reels were produced during the year, with topics such as Law Enforcement, Bushmeat Hunting, Electrocution, World Snake Day, Corridors, and Sounds of Nature.

Articles

- The team published six articles in Sanctuary Asia magazine on a variety of topics including WCT’s large carnivore monitoring project in the Sahyadri-Konkan Corridor; the pioneering work of WCT’s Conservation Dogs; the life, work and struggles of India’s forest watchers; how the science of forensics can help tackle wildlife crime; WCT’s Wildlife Judgements Database app for forest staff; and WCT’s Riverine Ecosystems and Livelihoods project.
- The team published 33 articles on the WCT blog, covering a wide range of conservation and natural history topics.

Website

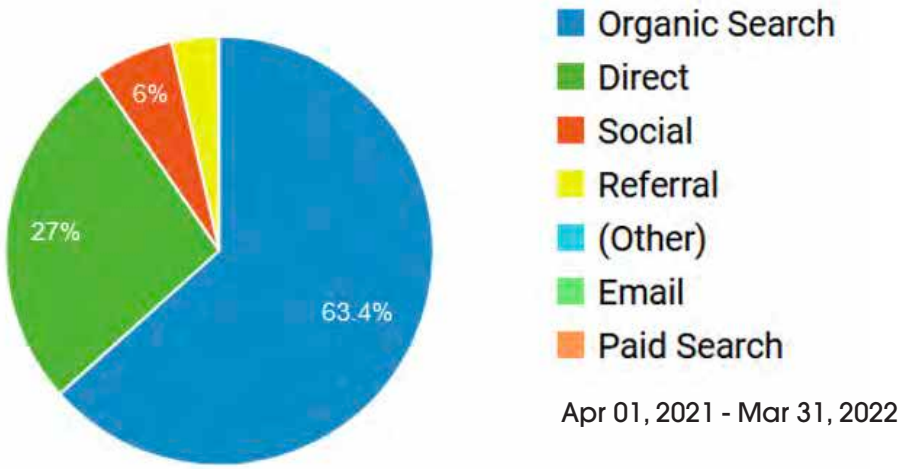
- Website visitors have gone up by over 24 percent year on year

FY	Users	New Users	Sessions
2021-22	49,657	48,976	63,869
2020-21	39,986	39,811	55,228
Variance	24%	23%	16%

- Unique Pageviews have increased by 11 percent year on year

FY	Pageviews	Unique Pageviews
2021-22	1,07,542	88,645
2020-21	97,184	80,158
Variance	11%	11%

- Search Engine Optimisation (SEO) initiatives contributed to over **63%** of the overall website traffic (versus **60%** in the previous year)



- A total of 39 blogs and 36 webpages were published to create awareness about various environmental issues and about WCT’s field interventions.
- Video section was launched to educate the website visitors through an easy to digest, entertaining and engaging medium, and to make the WCT website more vibrant.
- Donors webpage was revamped to highlight WCT partners as well as individual well-wishers.

Other Initiatives

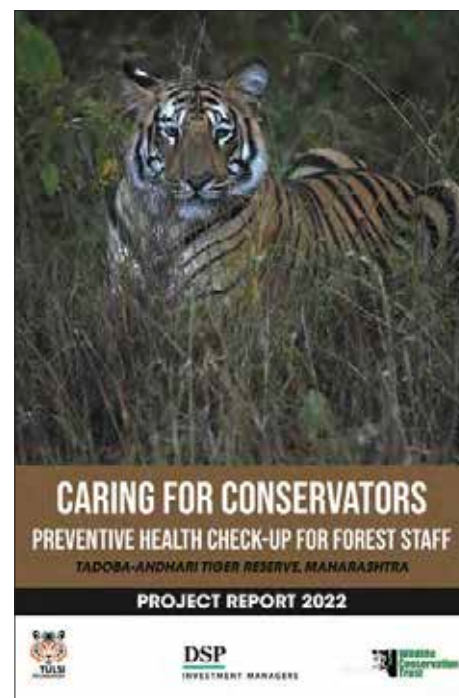
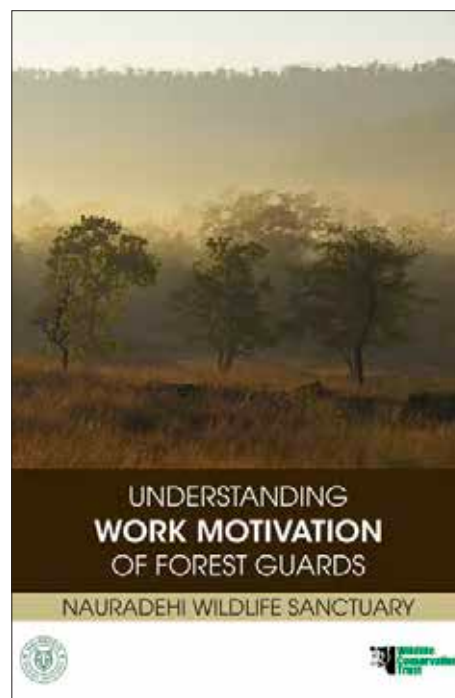
- WCT’s Wikipedia page launched to enhance the level of trust, credibility and authenticity as well as improve online visibility.
- Brand Manual launched to ensure that brand communication elements are used in the correct way, consistently, to build a powerful and recognisable brand.



PUBLICATIONS

Reports

- The Health team has produced the following reports:
 - Report on access to healthcare for forest staff working in tiger reserves in the Central Indian Landscape
 - Report on threat of Non Communicable Diseases (NCDs) among forest staff at tiger reserves in central India
 - Report on exposure to trauma and access to trauma care at work for forest staff in tiger reserves in Central India
- The Conservation Behaviour team produced a report titled 'Understanding work motivation of forest guards of the Nauradehi Wildlife Sanctuary', authored by Aniket Bhatkhande, Pooja Dewoolkar, Prachi Paranjpye, Pragya Acholia, Vivek Belhekar and Anish Andheria
- The REAL team produced the following reports:
 - Kelkar, N. & Dey, S. (2022). A Report on the Work Conducted in the Vikramshila Gangetic Dolphin Sanctuary (January to April 2022). Report for the Department of Environment, Forests, and Climate Change, Government of Bihar. Wildlife Conservation Trust, Mumbai, India, 35 pp. In preparation.
 - Bakshi, S., Dey, S., and Kelkar, N. (2022). A Report on Cases of Ganges River Dolphin Mortality from Malda District, West Bengal. Technical Report submitted to the Divisional Forest Office, West Bengal Forest Department, Malda district. Wildlife Conservation Trust, India, 12 p.
 - Kelkar, N. & Dey, S. (2021). Ganges river dolphins and other biodiversity in the Mahananda River in Bihar and West Bengal: A report on the first complete survey, November 2021. Report for the Department of Environment, Forests, and Climate Change, Government of Bihar. Wildlife Conservation Trust, Mumbai, India, 35 pp.



WCT reports

Research Papers, Posters, and abstracts

- The Health team produced following abstracts that were accepted at the Royal College of Emergency Medicine, UK, Annual Scientific Conference, 2021:
 - The prevalence of pre-hospitalisation trauma in forest staff across wildlife reserves in central India
 - Pre-hospitalisation management of snakebites – challenges for global emergency medicine in central India
- The Health team published the following paper:
 - Vijayaraghavan, G., Tate, V., Gadre, V., & Trivedy, C. (2021). The role of religion in One Health. Lessons from the Hanuman langur (*Semnopithecus entellus*) and other human-non-human primate interactions. *American Journal Of Primatology*, 84(4-5). <https://doi.org/10.1002/ajp.23322>
- Girish Punjabi was the lead author on a scientific publication in the journal *PeerJ*, titled *Methodological approaches for estimating populations of the endangered dhole Cuon alpinus*. This was a collaborative publication of scientists from WCT, University of Copenhagen in Denmark, King Mongkut's University of Technology in Thailand, Wildlife Conservation Society – India, and National Centre for Biological Sciences, India. The authors are members of the Dhole Working Group part of IUCN's Canid Specialist Group.
- The Conservation Behaviour team produced the following working papers as part of the Fiscal Principles project:

1) A Review of Efforts Directed Towards an Inclusive and Equitable Green Grant

The paper presents an overview of the collection of efforts directed towards the formulation of the Finance Commission grant. The paper goes on to address the limitations of the existing work in context of the updates to the discourse on climate change. Every new initiative benefits significantly from the work that precedes it. In the same vein, this working paper attempts to lay a foundation for optimising public investments for climate action via the Finance Commissions.

2) A Synthesis of Valuation of Ecosystems and Allied Studies

The present work sought to provide an extensive coverage of all the ecosystem valuation studies conducted in the field. The paper illuminates, geographically, the varied ecosystems and elements within them, which have been valued by field scientists, allowing for a value-based comparison of different ecosystems.

3) The Social-Ecological System Framework: An Adaptation

Elinor Ostrom propounded the Social-Ecological Systems Framework (SESF) with the aim of understanding the governance structure of an ecosystem. The SESF enables a skeletal visualisation of the interactions in an ecosystem among the resources and its users. We will adapt this framework for calibrating an ecological functionality index (EFI).

4) Supply of Water to Mumbai: A Case Study for Valuing Ecosystem Services

A review of the efforts to present a fair valuation of the cost of water supply to Mumbai that takes into account the cost of ecological services. This attempt to put a monetary value on gains and losses of various stakeholders is important to understand inequity in realising ecological services within a state.

MEDIA COVERAGE

- The REAL team authored the following research papers:

- Kelkar, N., Smith, B.D., Alom, M.Z., Dey, S., Paudel, S. & Braulik, G.T. 2022. *Platanista gangetica*. The IUCN *Red List of Threatened Species* 2022: e.T41756A50383346. <https://dx.doi.org/10.2305/IUCN.UK.2022-1.RLTS.T41756A50383346.en>.
- Arthur, R.I., Valbo-Jørgensen, J., Lorenzen, K. & Kelkar, N. (2022) Stocking in inland food fisheries of South and Southeast Asia: Issues, risks, and rewards. *Fisheries Management and Ecology*, Published Online. Available from: <https://doi.org/10.1111/fme.12551>
- Kelkar, N., Arthur, R., Dey, S., Krishnaswamy, J. (2022) Flood-pulse variability and climate change effects increase uncertainty in fish yields: revisiting narratives of declining fish catches in India's Ganga River. *Hydrology* 9(4), 53. <https://doi.org/10.3390/hydrology9040053>
- Kelkar, N. & Arthur, R.I. (2022). A review of governance and tenure in inland capture fisheries and aquaculture systems of India. *FAO Fisheries and Aquaculture Circular No. 1230*. Chennai, FAO and ICSF. <https://doi.org/10.4060/cb8615en>
- Momblanch, A., Kelkar, N., Braulik, G. Krishnaswamy, J., Holman, I. (2022). Exploring trade-offs between SDGs for Indus River Dolphin conservation and human water security in the regulated Beas River, India. *Sustain Sci* **17**, 1619–1637. <https://doi.org/10.1007/s11625-021-01026-6>
- Samad, I., Kelkar, N. & Krishnaswamy, J. (2022). Life at the borderline: Responses of Ganges river dolphins to dry-season flow regulation of river and canal habitats by the Farakka barrage. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 32(2), 294– 308. <https://doi.org/10.1002/aqc.3763>

Popular Articles

- An article titled '*Securing the Sahyadri-Konkan Corridor*' authored by WCT's Conservation Writer Rizwan Mithawala, with contributions from Girish Punjabi of the Conservation Research team, was published in *Sanctuary Asia*'s April 2021 issue.
- An article titled '*Conservation Dogs*' authored by WCT's Conservation Writer Rizwan Mithawala, with contributions from Kiran Rahalkar, WCT's Wildlife Law Enforcement expert, was published in *Sanctuary Asia*'s June 2021 issue.
- An article titled '*Forensics Vs. Wildlife Crime: A Battle That Must Be Won*' authored by WCT's Conservation and Science Writer Purva Variyar, with contributions from WCT's Forensics expert C. Samyukta, was published in the August 2021 issue of *Sanctuary Asia*.
- An article titled '*Who's Watching Over the Forest*' authored by Rizwan Mithawala, WCT's Conservation Writer, was published in *Sanctuary Asia* October 2021 issue.
- An article titled '*River Animals and River People: For a Shared Future*' authored by Rizwan Mithawala, with contributions from Dr. Nachiket Kelkar of WCT's Riverine Ecosystems And Livelihoods (REAL) programme, was published in the *Sanctuary Asia*'s December 2021 issue.
- An article titled '*At Their Fingertips: WCT's New Wildlife Crime App for Foresters*' authored by Purva Variyar, with contributions from Kiran Rahalkar, was published in the *Sanctuary Asia*'s February 2022 issue.
- An article titled '*Old Dogs, New Tricks: Methods to Count Dhole Numbers*' co-authored by Girish Punjabi, wildlife biologist with WCT, was published in *Conservation India*.

- WCT trustee Aditi Kothari Desai was interviewed for a feature article by [YourStory](#)
- An article on WCT's Heater of Hope project was published in the [WorldAtlas](#)
- WCT President Dr. Anish Andheria was interviewed for an article by [WorldAtlas](#) that discusses the risks to Asia's dhole populations along with other global experts
- WCT's Wildlife Biologist and Connectivity Conservation expert Milind Pariwakam was interviewed by the [Times of India](#)
- WCT's work involving the conservation dogs was featured by [The Weather Channel](#)
- A story on WCT's Conservation Dogs Unit was published in [Deshdoot](#)
- WCT's large carnivore occupancy study in the Sahyadri-Konkan corridor was featured by [The Indian Express](#) and [Mongabay India](#)
- WCT's work focused on improving the health of the forest staff including mental health, and building their capacity was mentioned in an article published in the [The Wire](#)
- AI conservation initiatives by WCT in collaboration with Google Research India's AI Lab were covered by [Analytics India Magazine](#)
- An article on WCT's Riverine Ecosystems and Livelihoods Programme was published in [Mongabay India](#)
- REAL programme head Dr. Nachiket Kelkar and his team's work was covered by [The Hindu](#)

**PROVIDING FUNDS
FOR CONSERVATION**



DONATIONS TO FOREST DEPARTMENTS

The work of this department aligns with the above UNSDGs.

Tamil Nadu Forest Department (Kalakad Mundanthurai Tiger Reserve)					
					
Mahindra-Bolero Camper	Bicycles	Gumboots	Shoes	Snake Catching Kit	Motorcycles

Madhav National Park			
			
Motorcycles	Winter Jackets	Shoes	Mahindra-Bolero Camper

Nauradehi Wildlife Sanctuary		Pench TR, MP	Vavihar NP	Srivilliputhur-Megamalai TR
				
Mahindra-Bolero Camper	Motorcycles	Motorboat Engine	Bicycles	Mahindra-Bolero Camper

PROJECT FUNDING

WCT provided financial support to the following organisations in an effort to fund some of their projects:

- Kalinga Foundation
- Uttarayan Wildlife
- Balipara Tract and Frontier Foundation
- Tadoba-Andhari Conservation Foundation

Financial Statement for the year ended 31 March 2022		
ABRIDGED INCOME & EXPENDITURE ACCOUNT	Amount in '000	Amount in '000
INCOME	2021-22	2020-21
Donations in Cash or Kind	26,578	25,389
Grants	67,661	30,625
Interest	26,369	36,621
Other Income	148	
Surplus/Deficit for the year		
Total Income	1,20,756	92,635
EXPENDITURE		
Establishment Expenses	32,057	32,230
Depreciation	12,504	11,081
Expenditure on Objects of the Trust	66,545	64,326
Surplus/Deficit carried over to Balance Sheet	9,650	-15,002
Total Expenditure	1,20,756	92,635
ABRIDGED BALANCE SHEET	Amount in '000	Amount in '000
FUNDS AND LAIBILITIES	2021-22	2020-21
Corpus Funds	4,73,171	4,73,171
Earmarked Fund (CSR Grants)	37,687	34,886
Provision for Expenses	1,326	1,425
Income and Expenditure A/c	46,091	61,093
Surplus/Deficit for the year	9,650	-15,002
Total Liabilities	5,67,925	5,55,573
PROPERTY AND ASSETS		
Fixed Assets	42,831	38,173
Investments	3,67,000	3,49,000
Advances	7,738	3,926
Outstanding Interest	445	1,483
Receivables and others	5,647	2,677
Deposits with Banks	1,06,300	1,34,950
Cash/Bank Balances	37,964	25,364
Total Assets	5,67,925	5,55,573
Summarised from Financial Statements audited by M/s Gunderia and Co., Chartered Accountants Dated : 30 September 2022		





WCT has registrations under Section 80G of the Income Tax Act, 1961; Section 12-A (a) of the Income Tax Act, 1961; Bombay Public Trust Act 1950; and the Foreign Contribution Regulation Act, 2010

1103, 11th Floor, P.J. Tower, Bombay Stock Exchange Building, Dalal Street, Fort, Mumbai, 400 001, India
Tel. (Direct): +91 22 492 55505 (Board): +91 22 492 55555 | E-mail: anish@wctindia.org