

Issue 37 | October 2022

# TRAFFIC<sup>®</sup> POST

NEWSLETTER ON WILDLIFE TRADE IN INDIA



► Special Edition : **TIGERS**

# CONTENTS

Illegal wildlife trade is reportedly the fourth largest global illegal trade after narcotics, counterfeiting and human trafficking. It has evolved into an organised activity threatening the future of many wildlife species.

TRAFFIC's newsletter - TRAFFIC Post- on wildlife trade in India was started in September 2007 with a primary objective to create awareness about poaching and illegal wildlife trade.

TRAFFIC Post was born out of the need to reach out to various stakeholders including decision makers, enforcement officials, judiciary and consumers about the extent of illegal wildlife trade in India and the damaging effect it could be having on the endangered flora and fauna.

Since its inception, TRAFFIC Post has highlighted pressing issues related to illegal wildlife trade in India and globally, flagged early trends, and illuminated wildlife policies and laws. It has also focused on the status of legal trade in various medicinal plant and timber species that need sustainable management for ensuring ecological and economic success.

TRAFFIC Post comes out three times in the year and is available free of cost both online and in print. You can subscribe to it by writing to [traffindic@wwfindia.net](mailto:traffindic@wwfindia.net).

All issues of TRAFFIC Post can be viewed at [www.traffindicindia.org](http://www.traffindicindia.org); [www.traffic.org](http://www.traffic.org).

Map Disclaimer: The designations of the geographical entities in this publication and the presentation of the material do not imply the expression of any opinion whatsoever on the part of WWF-India or TRAFFIC concerning the legal status of any country, territory, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

#### **MANAGING EDITOR:**

Dilpreet B. Chhabra      [dilpreet.chhabra@traffic.org](mailto:dilpreet.chhabra@traffic.org)

#### **EDITORIAL TEAM:**

Merwyn Fernandes      [merwyn.fernandes@traffic.org](mailto:merwyn.fernandes@traffic.org)  
Astha Gautam      [astha.gautam@traffic.org](mailto:astha.gautam@traffic.org)

#### **COPY EDITING:**

Abbie Pearce      [abbie.pearce@traffic.org](mailto:abbie.pearce@traffic.org)

#### **DESIGN:**

Dilpreet B. Chhabra      [dilpreet.chhabra@traffic.org](mailto:dilpreet.chhabra@traffic.org)

#### **PHOTO CREDIT:**

GS Bhardwaj (Front cover)



# TRAFFIC





## A

### IN FOCUS

- |                                                                      |    |
|----------------------------------------------------------------------|----|
| A1. India's tigers threatened by poaching and illegal wildlife trade | 6  |
| A2. Saving the wild tiger: A global overview                         | 11 |



## B

### TRAFFIC UPDATES

- |                                                                                               |    |
|-----------------------------------------------------------------------------------------------|----|
| B1. New initiatives rolled out to curb wildlife trafficking through India's airports          | 16 |
| B2. Forest officials undergo training to strengthen skills in wildlife law enforcement        | 18 |
| B3. Wildlife sensitisation programme organised for Meghalaya Judiciary                        | 19 |
| B4. Owl protection gets new wings: New identification tools available                         | 20 |
| B5. India's orchids in illegal wildlife trade: New factsheet and poster launched              | 21 |
| B6. Shining light on the Indian Spiny-tailed Lizard in illegal trade: New Factsheet available | 22 |
| B7. Dudhwa Tiger Reserve gets new awareness standees on wildlife species in illegal trade     | 23 |
| B8. India's wildlife sniffer dog squad to expand: Six young dogs begin training               | 23 |
| B9. Canines for felines: the wildlife sniffer dogs countering tiger crime in India            | 25 |



## C

### GLOBAL SCAN

- |                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| C1. Six top NGOs commitment to a cooperative approach to saving the tiger- A shared vision | 28 |
|--------------------------------------------------------------------------------------------|----|



## D

### TRAFFIC ALERT

- |                                                                                        |    |
|----------------------------------------------------------------------------------------|----|
| D1. Forest Department apprehends six in tiger poaching case at Nagarhole Tiger reserve | 30 |
| D2. Three held with tiger parts along the Arunachal-Assam border                       | 30 |
| D3. Tiger skin seized from Keonjhar district of Odisha                                 | 30 |







# EDITORS' DESK



**Dr Merwyn Fernandes**  
Programme Coordinator,  
TRAFFIC's India Office



**Dr Dipankar Ghose**  
Director - Wildlife & Habitats  
Programme, WWF-India

Dear Readers,

As we all slowly move on and try to normalise ourselves post the COVID-19 pandemic to everyday life beyond the lockdowns, we are now aware of zoonotic diseases' effects and their link to wildlife markets. Under such circumstances, we need to address this issue and strengthen our footprint in wildlife crime control initiatives by working in close collaboration with the government authorities.

The year 2022 is the 'Year of the Tiger', and in 2023, India's flagship initiative on targeted species conservation - Project Tiger - will complete 50 years. Therefore, TRAFFIC's India Office looks into different aspects of tiger conservation with this special edition of TRAFFIC Post focusing on tigers.

India hosted the pre-Summit meeting on tiger conservation on 10-11 August 2022. Tiger Range Countries (TRCs) other than China and Indonesia participated and pledged their support to take action for the long-term conservation of this species. The Second International Tiger Forum followed this in Vladivostok, Russian Federation on 5 September 2022. The Tiger Range Countries took the pledge and signed the Vladivostok Declaration on tiger conservation that talks about regional and international cooperation for *in-situ* tiger conservation and proposes reintroducing tigers in their historical ranges where it has been recently exterminated. It also expressed concern about the

lack of a strategy to phase out tiger farms and their impact on the continuing illegal tiger trade. In two articles, this special issue of TRAFFIC Post highlights various aspects of tiger conservation and protection. One presents the global overview of tigers, their status, recovery of populations, and the way forward. The other highlights the threat to tigers from the illegal wildlife trade in India.

We hope you will enjoy reading this issue of TRAFFIC Post and be motivated to work and support tiger conservation initiatives in partnership with authorities, agencies and civil society organisations.

Thank you for your continuing support.



# A | IN FOCUS



## A1. INDIA'S TIGERS THREATENED BY POACHING AND ILLEGAL WILDLIFE TRADE

Astha Gautam, Project Officer, TRAFFIC, India Office



Tigers are majestic big cats whose breeding population inhabits the wild habitats of Bangladesh, Bhutan, China, India, Indonesia, Malaysia, Myanmar, Nepal, Russia, and Thailand (Goodrich, et. al., 2022). Currently, there are six recognised extant subspecies of tigers; Amur Tiger *P. t. altaica*, Northern Indochinese Tiger *P. t. Corbetti*, Malayan Tiger *P. t. Jacksoni*, Sumatran Tiger *P. t. Sumatrae*, Bengal Tiger *P. t. tigris*, and South China Tiger *P. t. amoyensis*. The latest IUCN Red List assessment estimates the global tiger population between 3,726 and 5,578 individuals (3,140 mature individuals) with South Asian range countries inhabiting 76% of the global population (Goodrich, et. al., 2022).

Tigers are an important ecological and cultural identity in the countries they inhabit. They are an umbrella species helping the conservation of co-habiting species and maintaining their ecosystem as a keystone species. As per the latest IUCN assessment, tigers are categorised as "Endangered", with the hunting of tigers and their prey as the main driver of the population decline since 1991 (Goodrich, et. al., 2022). Over the past three generations, the tiger population globally has had a range contraction of more than 50%, occupying less than 7% of their historic range. There is also a suspected reduction of more than 50% of the population, attributed mainly to poaching and habitat



loss driven by anthropological activities. Tiger's prey base is also targeted for bush meat hunting, impacting the species' survival.

Tigers are protected under national legislation in their range countries. Since 1975, all tiger species globally have been listed under the Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), prohibiting their international commercial trade. Despite the national and international legislation and regulations, international trade (Morgan, *et. al.*, 2021), poaching and illicit trade in their parts continue. Tigers are now locally extinct in Viet Nam, Cambodia, and Lao People's Democratic Republic (Lao PDR) (Goodrich, *et. al.*, 2022) attributed mainly to the poaching of tigers and their prey species (Sanderson, *et. al.*, 2006, O'Kelly, *et. al.*, 2012, Johnson, *et. al.*, 2016).

## TIGERS IN INDIA

*Panthera tigris tigris* (Linnaeus, 1758), or Bengal Tiger, found in the Indian sub-continent (Goodrich, *et. al.*, 2015) is one of the six recognised extant subspecies of tigers. The Bengal Tiger is an iconic species native to India, an important cultural symbol inducted as India's national animal. In India, it is provided with the highest level of protection, prohibiting the hunting and trade of species under the Wildlife (Protection) Act, 1972, through its listing as a Schedule I species.

According to an estimate by the National Tiger Conservation Authority (NTCA) of India published in 2020, there are 2967 tigers in India and the country has 52 designated Tiger Reserves for their protection and management. Poaching and wildlife trafficking in India to supply the persistent demand for their high-value parts is a significant threat to India's tigers.

## THREAT TO INDIA'S TIGERS FROM POACHING AND ILLEGAL WILDLIFE TRADE

Poaching for illegal wildlife trade has emerged as a significant threat to the existence of wild tigers across its

range, and South Asian countries play a critical role in the illicit tiger trade, with many countries reporting the seizure of tiger parts (Paudel, *et. al.*, 2020). There is a demand for high-value tiger parts such as skin, nails and claws as curios, and bones in Asian traditional medicine (Coals, *et. al.*, 2020). The growing number of potential customers with resources drive the demand for illegal tiger products (Goodrich, *et. al.*, 2015). The demand for the parts exists in international markets (Davis, *et. al.*, 2020) (Moyle, 2009), with other neighbouring countries being exploited as source and transit (Krishnasamy, *et. al.*, 2018).

India has 2967 tigers in the wild, the world's highest population of wild tigers (Jhala, *et. al.*, 2020). The population is vulnerable to the tenacious illegal wildlife trade and demand for their derivatives in international markets. Parts of tigers poached in India are often supplied across porous borders to neighbouring countries and end up in international markets (Nittu, *et. al.*, 2022).

In India, 547 tiger mortalities were recorded from 2017-2021, and 154 of these tigers lost their lives to poaching and illegal wildlife trade, according to the National Tiger Conservation Authority (NTCA), a statutory body under the Ministry of Environment, Forests and Climate Change that maintains the details of tiger mortality events that occur in India on their database: TIGERNET. These 154 poaching incidents were attributed to seizure (55), poaching (33), poisoning (25), electrocution (22), snaring (9), and shooting (7), while there was insufficient data (3) for others (Figure 1).

The analysis of the above data for 2017 to 2021 found that the 55 incidents of tiger-related seizure recorded (Figure 2) in India show that every third tiger mortality (35.7 %) is due to poaching attributed to seizures of tigers and their parts.

According to a global study by TRAFFIC titled 'Skin and bones unresolved' (Wong and Krishnasamy, 2019), the highest number of seizure incidents across 32 countries and territories globally were reported from

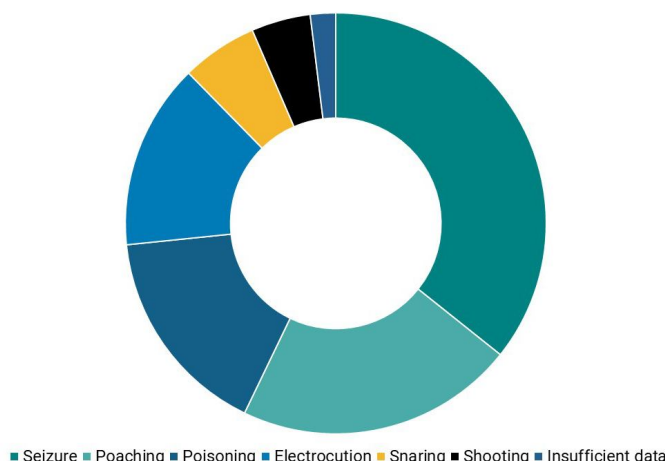


Figure 1: Tiger mortality causes from 2017 to 2021 as per NTCA.





© Dr Saket Badola

India for the period 2000 to 2018. This included 463 seizures amounting to an estimated 625 equivalent tigers, with skin and bones being the top two seized commodities. According to the report, skins were the single most frequently seized tiger part in the world, with 38% of these skins being seized in India. Also, 42% of tiger claws and teeth, and 28% of bones seized globally were reported from India for the study period.

One of the most commonly reported causes of mortality in the poaching of tigers is electrocution, which along with snaring, is a disturbing trend that poses a significant risk to tigers and numerous other species. Snares, in particular, are cheap and made of easily accessible materials, thus are employed at a concerning scale within the targeted areas to poach wild animals for consumption and trade. Due to the indiscriminate and destructive nature of these poaching methods, an array of wild animals end up as accidental victims. Even those animals, including tigers that manage to survive the snares end up

debilitated and suffer due to the wounds, often becoming incapable of hunting their prey, thus ending in conflict with humans.

Along with illegal trade, habitat loss and degradation is other serious concern for the species. Shrinking habitats, with humans and wildlife having increased possibilities of coming in contact, also escalate the risk of human-wildlife conflict. These contacts risk the loss of livestock and life (Gulati, *et. al.*, 2021), which triggers negative attitudes towards the species and can lead to poaching and killing of tigers in retaliation.

## CONCLUSION

Tigers are a fundamental part of India's forest. They keep the lush green abode of wildlife living and thriving through the vital ecosystem services such as maintaining prey population and keeping the food chain

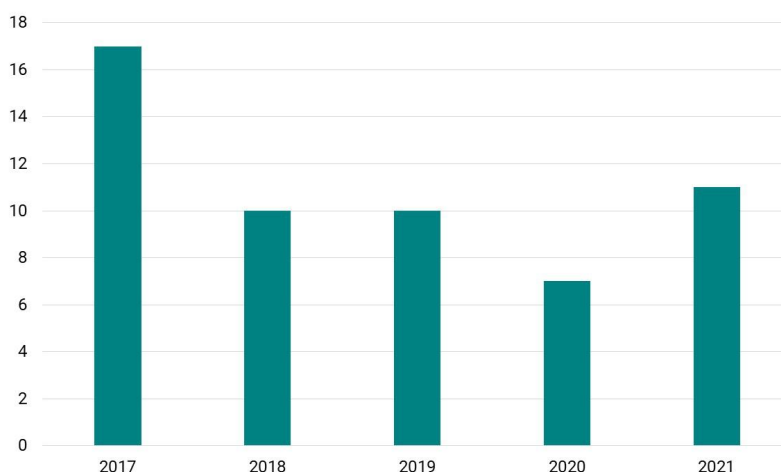


Figure 2: Number of seizures of tigers and their parts from 2017 to 2021 (Source: Tigernet, NTCA)

balance they provide. Yet, these majestic species are threatened by depleting habitats and lingering demand for their body parts. India lost 154 tigers to the illegal wildlife trade and poaching in five years (2017 to 2021). This loss is a worrying blow to the significant efforts at the local, national and international levels to protect the future of our national animal. There is a need to strengthen efforts by enforcement and policymakers to curb the illegal wildlife trade and prevent poaching of tigers within their habitat. Since tigers play an essential role in maintaining the ecosystem in which both human and wildlife depend on, their future and survival are interlinked, and we must ensure that they get to live free in the wild.

## REFERENCES

- Coals, P., Moorhouse, T. P., D'Cruze, N. C., Macdonald, D. W., & Loveridge, A. J. (2020). Preferences for lion and tiger bone wines amongst the urban public in China and Viet Nam. *Journal for Nature Conservation*, 57.
- Davis, E. O., Willemsen, M., Dang, V., O'Connor, D., & Glikman, J. A. (2020). An updated analysis of the consumption of tiger products in urban Viet Nam. *Global Ecology and Conservation*, 22. DNPWC and DFSC. (2022). Status of Tigers and Prey in Nepal 2022. Department of National Parks and Wildlife Conservation and Department of Forests and Soil Conservation. Ministry of Forests and Environment, Kathmandu, Nepal.
- Goodrich, J., Lynam, A., Miquelle, D., Wibisono, H., Kawanishi, K., Pattanavibool, A., Htun, S., Tempa, T., Karki, J., Jhala, Y. & Karanth, U. (2015). *Panthera tigris*. The IUCN Red List of Threatened Species 2015: e.T15955A50659951. <https://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T15955A50659951.en>. Accessed on 16 June 2022.
- Goodrich, J., Wibisono, H., Miquelle, D., Lynam, A.J., Sanderson, E., Chapman, S., Gray, T.N.E., Chanchani, P. & Harihar, A. (2022). *Panthera tigris*. The IUCN Red List of Threatened Species 2022: e.T15955A214862019. <https://dx.doi.org/10.2305/IUCN.UK.2022-1.RLTS.T15955A214862019.en>. Accessed on 18 October 2022.
- Gulati, S., Karanth, K. K., Le, N. A., & Noack, F. (2021). Human casualties are the dominant cost of human-wildlife conflict in India. *Proceedings of the National Academy of Sciences*, 118(8).
- Jhala, Y.V., Qureshi, Q. and Nayak, A.K. (2020). *Status of tigers, copredators and prey in India*, 2018. National Tiger Conservation Authority, Government of India, New Delhi, and Wildlife Institute of India, Dehradun.
- Johnson, A., Goodrich, J., Hansel, T., Rasphone, A., Saypanya, S., Vongkhamheng, C., Venevongphet, and Strindberg, S. (2016). To protect or neglect? Design, monitoring, and evaluation of a law enforcement strategy to recover small populations of wild tigers and their prey. *Biological Conservation*, 202: 99-109.
- Krishnasamy, K., Shepherd, C. R., & Or, O. C. (2018). Observations of illegal wildlife trade in Boten, a Chinese border town within a Specific Economic Zone in northern Lao PDR. *Global ecology and conservation*, 14.
- Morgan, K. I., Ewart, K. M., Nguyen, T. Q., Sitam, F. T., Ouitavon, K., Lightson, A. L., & McEwing, R. (2021). Avoiding common numts to provide reliable species identification for tiger parts. *Forensic Science International: Reports*, 3.
- Moyle, B. (2009). The black market in China for tiger products. *Global Crime*, 10(1-2):124-143.
- Nittu, G., Shameer, T. T., Nishanthini, N. K., & Sanil, R. (2022). The tide of tiger poaching in India is rising! An investigation of the intertwined facts with a focus on conservation. *GeoJournal*, 13:1-14.
- O'Kelly, H.J., Evans, T.D., Stokes, E.J., Clements, T.J., Dara, A., Gately, M., Menghor, N., Pollard, E.H.B., Soriyun, M. and Walston, J. (2012). Identifying Conservation Successes, Failures and Future Opportunities; Assessing Recovery Potential of Wild Ungulates and Tigers in Eastern Cambodia. *PLoS ONE*, 7(10).
- Paudel, P. K., Acharya, K. P., Baral, H. S., Heinen, J. T., & Jnawali, S. R. (2020). Trends, patterns, and networks of illicit wildlife trade in Nepal: A national synthesis. *Conservation Science and Practice*, 2(9).
- Sanderson, E., Forrest, J., Loucks, C., Ginsberg, J., Dinerstein, E., Seidensticker, J., Leimgruber, P., Songer, M., Heydlauff, A., O'Brien, T., Bryja, G., Klenzendorf, S and Wikramanayake, E. (2006). *Setting Priorities for the Conservation and Recovery of Wild Tigers: 2005-2015*. The Technical Assessment. WCS, WWF, Smithsonian, and NFWF-STF, New York and Washington, DC, USA.
- Walston, J., Robinson, J.G., Bennett, E.L., Breitenmoser, U., da Fonseca G.A.B., Goodrich, J., Gumal, M., Hunter, L., Johnson, A., Karanth, K.U., Leader-Williams, N., MacKinnon, K., Miquelle, D., Pattanavibool, A., Poole, C., Rabinowitz, A., Smith, J.L.D., Stokes, E.J., Stuart, S.N., Vongkhamheng, C. and Wibisono, H. (2010). Bringing the Tiger Back from the Brink—The Six Percent Solution. *PLoS Biology*, 8(9).
- Wong, R. and Krishnasamy, K. (2019). *Skin and Bones Unresolved: An Analysis of Tiger Seizures from 2000–2018*. TRAFFIC, Southeast Asia Regional Office, Petaling Jaya, Selangor, Malaysia.









© David Lawson / WWF-UK

## A2. SAVING THE WILD TIGER: A GLOBAL OVERVIEW

Dr Merwyn Fernandes, Programme Coordinator, TRAFFIC's India Office

Over the years, tigers increased significantly in some regions but disappeared from others across the globe. Poaching or illegal wildlife trade, prey depletion, and habitat destruction have been the major contributors to the decline. The continued illicit trade of tiger body parts and products (Wong and Krishnasamy 2020, WJC 2021), driven by high demand in China and the Southeast Asian region (WJC, 2021), is reported to be the single most significant threat to the existence of the species. With 3,140 wild tigers estimated globally (Goodrich, *et. al.*, 2022), there is a need to strengthen conservation actions for tigers and sustain the success gained through long-term efforts by governments, NGOs, civil society, and local communities.

### YEAR OF THE TIGER

2022 is the 'Year of the Tiger' in the Chinese calendar. It also represents a crucial milestone in tiger conservation, with multiple agreements scheduled, such as the 15<sup>th</sup> Conference of Parties (CoP15) meeting for Conventional of Biological Diversity (CBD), the Convention of International Trade in Endangered Species (CITES), and

the Global Tiger Summit. These events present leaders of tiger range countries the opportunity to make critical decisions for the future of tigers.

### GLOBAL STATUS OF TIGERS

Globally, there has been more than a century of decline in wild tiger numbers and habitat. Three tiger subspecies, Bali Tiger *P. t. balica*, Javan Tiger *P.t. sondaica*, and Caspian Tiger *P.t. virgata* have gone extinct, and there is possible extinction of South China Tiger *P.t. amoyensis*. The remaining five subspecies; Amur Tiger *P.t. altaica*, Bengal Tiger *P.t.tigris*, Northern Indochinese *P.t. corbetti*, Malayan Tiger *P.t. jacksoni*, and Sumatra Tiger *P.t. sumatrae* are precariously placed.

The latest (2021) assessment of tiger reported extant populations in Bangladesh, Bhutan, China, India, Indonesia, Malaysia, Myanmar, Nepal, Russian Federation and Thailand, while the species became extinct in Viet Nam, Lao PDR and Cambodia (Goodrich, *et. al.*, 2022). (Table 1) (Sanderson *et al.*, 2006).



Tiger subspecies	Country	Year of assessment	Tiger number estimates
Bengal <i>P.t. tigris</i>	Bangladesh	2018	114
Bengal <i>P.t. tigris</i>	Bhutan	2014	103
Northern Indochinese <i>P.t. corbetti</i>	Cambodia	2015–2020	0
Northern Indochinese <i>P.t. corbetti</i> Amur <i>P.t. altaica</i> Bengal <i>P.t. tigris</i>	China	2020	>20
Bengal <i>P.t. tigris</i>	India	2018	2967
Sumatra <i>P.t. sumatrae</i>	Indonesia	2004–2018	393
Northern Indochinese <i>P.t. corbetti</i>	Laos	2015–2020	0
Malayan <i>P.t. jacksoni</i>	Malaysia	2018	<100
Northern Indochinese <i>P.t. corbetti</i>	Myanmar	2018	>22
Bengal <i>P.t. tigris</i>	Nepal	2022	355
Amur <i>P.t. altaica</i>	Russia	2015–2020	386
Northern Indochinese <i>P.t. corbetti</i> , Malayan <i>P.t. jacksoni</i>	Thailand	2020	145–177
Indochinese <i>P.t. corbetti</i>	Viet Nam	2015–2020	0

**Table 1: Wild tiger numbers for each range country and the year of assessment.**

Source: IUCN Red List assessment (Supplementary information); Global Tiger Forum 2021; Nepal (National Tiger and Prey Survey 2022)

## ROAD TO RECOVERY

In 2008, a global alliance of governments, international organisations, civil society, conservation organisations, scientific communities, and the private sector formed the Global Tiger Initiative (GTI) to save wild tigers from extinction. Led by 13 TRCs with founding partners such as the World Bank, the Global Environment Facility (GEF), the Smithsonian Institution, Save the Tiger Fund, and International Tiger Coalition, GTI represents more than 40 non-government organisations.

Two years later, in 2010, at the Global Tiger Summit in Saint Petersburg, Russia, the heads of government from the 13 TRCs pledged their support for protecting and conserving wild tigers and their habitat. They adopted an overarching goal to double the number of wild tigers across the geographical area from about 3,200 to more than 7,000 individuals by 2022. They adopted the Global Tiger Recovery Program (2010–2022) that outlined an action plan to strengthen national policies, build institutional frameworks, and secure financial commitments to protect and conserve tigers across its range.

Since then, TRCs have been taking tangible steps towards realising their goal while being ably supported by NGOs. One of the main achievements has been the systematic implementation of country-wide assessments in tiger range countries. The photographic capture-recapture sampling method has been used for estimating tiger

abundance, yielding the most comprehensive population estimates. Such surveys were undertaken in Bhutan (Department of Forest and Park Service, 2015), Nepal (Dhakal *et al.*, 2014) and India (Jhala *et al.*, 2015).

The latest assessment of the tiger population in forested habitats in 20 states of India used innovative technological tools to collect and process data. The assessment used M-STripes (Monitoring system for Tigers - intensive protection and ecological status) to digitally record primary field data with photographs appended with geographical location and survey information. The survey also used artificial intelligence and neural network models (CaTRAT-Camera Trap data Repository and Analysis Tool) for automated segregation of camera trap photographs to species. ExtractCompare, with its ability to fingerprint tigers from their stripe patterns, was used to count the number of individual tigers (Jhala *et al.*, 2020).

Policy level initiatives were also undertaken in China, where the Natural Forest Protection Policy was passed, leading to safeguarding the forests in the northeastern part of China, a critical habitat suitable for the Amur Tiger – continuous with their population in Russia. An assessment of the population and habitat of the Amur Tiger was undertaken from 2013–2018 in the region of Laoyeling, Zhangguangcailing, Wandashan and the Lesser Khinghan Mountains in China.



© Adam Oswell

Fifty-five wild Amur Tigers were recorded using camera trap surveys, and 30 individuals were identified through genetic analysis. Though the increase in numbers was encouraging, the breeding population was reported only from one site, namely the Laoyeling region (Qi *et al.*, 2021).

In 2021, the United States of America, known to have captive-bred populations, enacted policies such as the Big Cat Public Safety Act 2021 to prohibit private individuals from possessing big cats, including tigers or any hybrid of these species. This prohibition applied to big cats kept as pets in sanctuaries and universities while exempting zoos.

In recent years China, India, Nepal and Russia have celebrated achievements in tiger conservation. On the Global Tiger Day 2022, Nepal announced that they have nearly tripled the number of wild tigers in their country as per the National Tiger and Prey Survey, 2022 (DNPWC and DFSC, 2022) by protecting key tiger habitats and corridors, partnering with local communities and curbing poaching and illegal wildlife trade. The stories of other TRCs such as Thailand, Malaysia, and Indonesia still needs to be showcased to encompass the global scenario of tiger conservation.

## WAY FORWARD

**1. Sustaining tiger populations, maintaining habitat connectivity and re-establishing populations:** Efforts by TRCs to monitor and protect tigers in the wild have been centred around providing safe habitats for the species to thrive, focused within protected areas (PAs). However, there is a need to estimate the tiger population outside the PAs and demarcate the spatial extent within which interventions should be carried out while establishing baselines. There is also a need to set realistic population targets and assess potential timelines to do this, as many TRCs are still struggling to sustain or increase their tiger populations.

In cases where the efforts to sustain the tiger population have been successful, and the population is found in high densities, tigers have been outflow/movement to surrounding areas, agricultural fields, and villages. This outflow has resulted in human-wildlife conflict and, tigers being poached for illegal wildlife trade due to limited protection efforts outside the PAs. Thus, there is a need to enhance actions in monitoring and reporting tigers, even from outside the PAs.

The connectivity of tiger habitats and corridors is critical for maintaining genetic diversity within the area. Securing tiger meta-populations for long-term conservation requires functional connectivity to be maintained. Often this involves strengthening efforts beyond the boundaries of the PAs where they are vulnerable to poaching and creating rigid boundaries via infrastructure projects such as roads (Carter *et al.*, 2020). Critical to this is the protection of corridors that connect these PAs.

Reducing poaching pressure on tiger prey species by strengthening enforcement actions against perpetrator and raising awareness against the consumption of wild meat sourced from key prey species, including in the transborder region such as in the case of India-Nepal, India-Bhutan, India-Bangladesh, Thailand-Myanmar, Laos-Myanmar, and China-Russia, is also necessary for tiger protection and conservation.

## 2. Human resources and infrastructure support:

The success of tiger conservation and their habitat relies on the indispensable role and capacity of the enforcement officers managing tiger areas and the support available to them for performing their responsibilities. A 2019 report (Belecky *et al.*, 2019) on the status of frontline workers highlighted many critical gaps in the deployment of their duties, including but not limited to the numbers of officers deployed, current training curriculum, and infrastructure support at the field sites.



In many of the TRCs, some of these issues are being addressed. For example, in India, the institutionalisation of an annual assessment of security measures is present for Tiger Reserves

([https://ntca.gov.in/assets/uploads/Reports/Security\\_Audit\\_Protocol.pdf](https://ntca.gov.in/assets/uploads/Reports/Security_Audit_Protocol.pdf)) and has been put in place and subsequently building the same into the management plan for the Tiger Reserve. Efforts have been undertaken to assess training modules for their effectiveness, and new modules are being suggested to address gaps within the existing training programme. There is also a need to evaluate the current state of security arrangements across all TRCs and the forested areas adjacent to known Tiger Reserves and Protected Areas.

**3. Collaboration and cooperation to curb the illegal wildlife trade:** Poaching and illegal trade in tigers and their derivatives continue to be a significant concern for tiger conservation (Wong and Krishnasamy, 2019). There is evidence that poaching of tigers has led to their extirpation in Cambodia, Laos, and Viet Nam while Malaysia is reporting a drastic decline in the tiger population. Many TRCs have taken steps to address wildlife crime issues and the illegal trade of tigers and their derivatives.

One significant gap in tackling this issue is a lack of agreement among TRCs on sharing information on wildlife crimes and the illegal wildlife trade of tigers. There is an absence of a mechanism to report country-wide details on the mortality of tigers. Within India, this issue has been partly addressed through Tigernet ([www.Tigernet.nic.in](http://www.Tigernet.nic.in)), a digital platform in India by the National Tiger Conservation Authority, MoEFCC and 'TRAFFIC's India Office. A similar online platform can be developed across other TRCs to streamline reporting of mortality and seizures of tigers and their derivatives. This can also facilitate a centralised database for tiger seizures and mortalities for each participating country and a repository of relevant resources, including identification guides and standard operating procedures.

Interpol can play a crucial role in bringing countries together to address this issue. The agency undertakes interventions that internationally coordinate intelligence-led operations to curb the illegal wildlife trade. These operations have led to the seizures of wildlife contraband

in different countries. Such operations must be replicated frequently, strengthening the cooperation and coordination across various law enforcement officers (LEAs) in TRCs, source and demand countries.

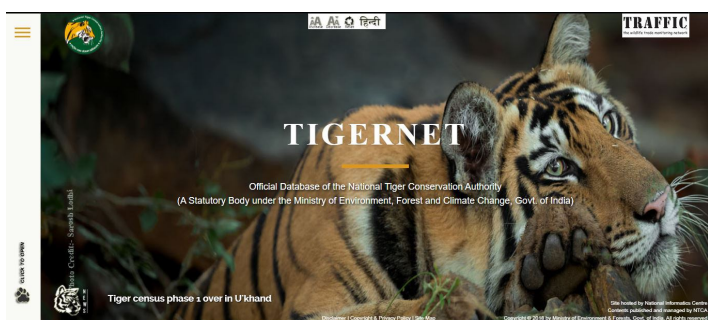
Further, there is a need to create an online platform for wildlife trade information exchange. This platform, when developed, must be secured with access to nominated LEAs officers of a country. This can facilitate communication and exchange of non-nominal information, seek assistance, and alert one another to relevant enforcement action across international borders.

**4. Use of technology:** Many tiger derivatives such as skin, claw, bone, canine, whisker, fat, meat, live (cubs), etc., have been seized. From these derivatives, presently, only skins are used to identify individual animals. This was made possible due to the constant efforts within a few TRCs to develop a mechanism to compare seized skins with the catalogued camera-trap images obtained from the population estimation exercise conducted for wild tigers. This technique was used to trace the tiger skins seized in Nepal back to India in 2017 (<https://timesofindia.indiatimes.com/city/bhopal/from-madhya-pradesh-to-nepal-tale-of-madhya-pradeshs-most-breeding-female-which-went-missing-with-two-cubs/articleshow/56429566.cms>). The use of this tool must be scaled to all TRCs for seizures done within and in other destination countries. The success of this tool relies on establishing a centralised database within each TRC's which is updated and maintained for practical use.

There is an urgent need to develop a standard set of markers that LEAs can use to identify the source of the seized derivative. This will go a long way in understanding the nuances of illicit trade and increasing the protection and management of the LEAs at the site/landscape where the tigers have been poached. This also includes the need to monitor tigers in captive conditions such as zoos and private farms across various countries. For the above-stated mechanism to help address the illegal trade of tigers and other wild species, it is necessary to have enhanced coordination within the scientific institutes and LEAs for effective investigation and successful conviction.

## CONCLUSION

The last ten years have witnessed many positives for tiger conservation and protection. Tiger numbers have increased in many countries, especially in India and Nepal. However, the next ten years need to focus on a more dedicated approach to securing tiger numbers in countries still struggling to protect their tigers. Tiger habitat and prey base need an equal share of protection, and complacency in any form can be disastrous for the wild tiger.



## REFERENCE

- Belecky, M., and Gray, T.N.E. 2020. *Silence of the Snares: Southeast Asia's Snaring Crisis*, WWF International.
- Belecky, M., Singh, R. and Moreto, W. 2019. *Life on the Frontline 2019: A Global Survey of the Working Conditions of Rangers*. WWF
- Carter, N., Killon, A., Easter, T., Brandt, J., and Ford, A. 2020. Road development in Asia: Assessing the range-wide risks to Tigers. *Science Advances* 6 eaaz9619.
- Dhakal, M., Karki, M., Jnawali, S. R., Subedi, N., Pradhan, N. M., Malla, S., Lamichhane, B., Pokheral, C. P., Thapa, G. J., Oglethorpe, J., Subba, S. A., Bajracharya, P. R., and Yadav, H. 2014. *Status of Tigers and Prey in Nepal*. Department of National Parks and Wildlife Conservation, Kathmandu, Nepal
- Department of Forest and Park Service. 2015. *Counting the Tigers in Bhutan: report on the National Tiger Survey of Bhutan, 2014 - 2015*. Thimphu, Bhutan.
- DNPWC and DFSC. (2022). *Status of Tigers and Prey in Nepal 2022*. Department of National Parks and Wildlife Conservation and Department of Forests and Soil Conservation. Ministry of Forests and Environment, Kathmandu, Nepal.
- Global Tiger Forum. 2019. *Status of Tiger Habitats in High Altitude Ecosystems of Bhutan, India, and Nepal* (Situation Analysis).
- Global Tiger Forum. 2021. *Global Tiger protected area compendium*.
- Goodrich, J., Wibisono, H., Miquelle, D., Lynam, A.J., Sanderson, E., Chapman, S., Gray, T.N.E., Chanchani, P. and Harihar, A. 2022. *Panthera tigris*. *The IUCN Red List of Threatened Species* 2022: e.T15955A214862019. <https://dx.doi.org/10.2305/IUCN.UK.2022-1.RLTS.T15955A214862019.en>.
- Jhala, Y.V., Qureshi, Q. and Gopal, R. 2015. *The status of Tigers in India 2014*. National Tiger Conservation Authority & Wildlife Institute of India. New Delhi and Dehradun.
- Jhala, Y.V., Qureshi, Q. and Nayak, A.K. (eds) 2020. *Status of Tigers, copredators and prey in India, 2018*. National Tiger Conservation Authority, Government of India, New Delhi, and Wildlife Institute of India, Dehradun.
- Qi, J., Gu, J., Dale YN., Miquelle, D.G., Holyoak, M., Wen, D., Liang, X., Liu, S., Roberts, N.J., Yang, E., Lang, J., Wang, F., Li, C., Liang, Z., Liu, P., Ren, Yi, Zhou, S., Zhang, M., Ma, J., Chang, J., and Jiang, G. 2021. Integrated assessments call for establishing a sustainable meta-population of Amur Tigers in northeast Asia. *Biological Conservation* 261: 109250.
- Sanderson, E., Forrest, J., Loucks, C., Ginsberg, J., Dinerstein, E., Seidensticker, J., Leimgruber, P., Songer, M., Heydlauff, A., O'Brien, T., Bryja, G., Klenzendorf, S and Wikramanayake, E. 2006. *Setting Priorities for the Conservation and Recovery of Wild Tigers: 2005-2015*. The Technical Assessment. WCS, WWF, Smithsonian, and NFWF-STF, New York and Washington, DC, USA.
- Verma, M., Negandhi, D., Khanna, C., Edgaonkar, A., David, A., Kadekodi, G., Costanza, R., Gopal, R., Bonal, B.S., Yadav, S.P. and Kumar, S. 2017. Making the hidden visible: Economic valuation of Tiger reserves in India. *Ecosystem Service* 26: 236-244.
15. Wildlife Justice Commission 2021. *Using intelligence analysis to save Tigers of Southeast Asia*. <https://wildlifejustice.org/using-intelligence-analysis-to-save-Tigers-in-southeast-asia/>
- Wong, R. and Krishnasamy, K. 2019. *Skin and Bones Unresolved: An Analysis of Tiger Seizures from 2000–2018*. TRAFFIC, Southeast Asia Regional Office, Petaling Jaya, Selangor, Malaysia.





# B | TRAFFIC UPDATES (INDIA)



## B1. NEW INITIATIVES ROLLED OUT TO CURB WILDLIFE TRAFFICKING THROUGH INDIA'S AIRPORTS

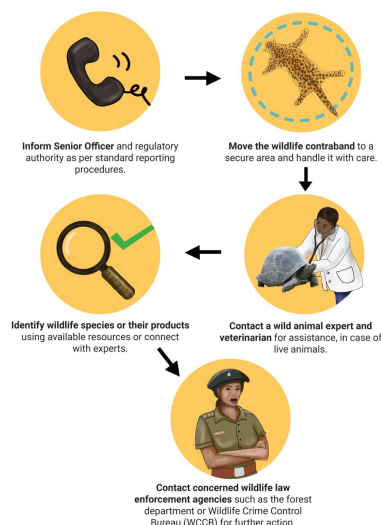
Traffickers are exploiting the growth of the aviation sector to move illegal wildlife products across India and its international borders. To curb this threat, TRAFFIC and UNEP (United Nations Environment Programme) in collaboration with WCCB (Wildlife Crime Control Bureau) and WWF-India joined forces and developed a suite of capacity-building tools to arm enforcement officials with the knowledge and skills to combat this crime that fuels declines in many Indian and international species. These capacity-building tools are accessible via a new online knowledge hub - [www.IWTKnowledgeHub.in](http://www.IWTKnowledgeHub.in).

Tools include:

- Two online courses on how to curb wildlife trafficking and relevant laws and regulations.
- An informative video highlighting wildlife trafficking through airports.
- Checklists for enforcement officials to use in their day-to-day operations.
- Posters and standees offering vital information about commonly trafficked wildlife species.



### DO'S AND DON'TS OF TAKING ACTION ON ENCOUNTERING WILDLIFE TRAFFICKING



The new awareness and capacity-building tools developed under the *Deterring and Disrupting wildlife trafficking in the air transport sector in India* project were launched at an event on 25 March 2022 at NACIN (National Academy of Customs, Indirect Taxes & Narcotics), Faridabad, Haryana.

To utilise the coming together of agencies, the launch event also included a Training of Trainers (ToT), where over 40 officials from the NACIN academies across India, Customs, CISF (Central Industrial Security Force), WCCB, and partner organisations attended the training in person or online.



[https://wwfin.awsassets.panda.org/downloads/high\\_flying\\_\\_airport\\_wildlife\\_trafficking\\_brief\\_march\\_2022.pdf](https://wwfin.awsassets.panda.org/downloads/high_flying__airport_wildlife_trafficking_brief_march_2022.pdf)

## HIGH FLYING: INSIGHT INTO WILDLIFE TRAFFICKING THROUGH INDIA'S AIRPORTS (2011-2020)

Number of airports reporting wildlife trafficking: **18**

Total number of seizure reports: **141**

Total number of wildlife species involved: **146**

Total number of wild animals including their body parts or derivatives seized: **70,000**

### Reptiles

most encountered group in wildlife seizures

### Chennai International Airport,

Tamil Nadu

recorded highest number of wildlife seizure incidents

TRAFFIC released findings of its study of wildlife seizures at Indian airports between 2011-2020 in the form of a factsheet titled '*HIGH FLYING: Insight into wildlife trafficking through India's airports.*' The study found trafficking of over 70,000 native and exotic wild animals equating to more than 146 species, including their body parts or derivatives (weighing around 4000kg), in 141 wildlife seizure incidents at 18 Indian airports between 2011-2020. Forty-six per cent of seizures were reptiles, including the Vulnerable Indian Star Tortoise *Geochelone elegans*.

"TRAFFIC's study of wildlife seizures at Indian airports reiterated the need to strengthen enforcement efforts to curb the exploitation of the airline sector for conducting illegal wildlife trade," said Dr Saket Badola, the Former Head of TRAFFIC's India Office.

"Illegal wildlife trade through airports is a major conservation threat magnified by the growth in the airline sector. Enforcement agencies need to prioritise bringing an end to wildlife trafficking. UNEP is pleased to have partnered with TRAFFIC, WWF-India, Customs, CISF and WCCB to design and implement a dedicated programme to help strengthen the detection of illegal wildlife trade at airports," added Mr Atul Bagai, Head of the United Nations Environment Programme Country Office in India.

Ms Tilotama Varma, Additional Director, WCCB, said, "Airports have emerged as a popular mode for transporting wildlife contrabands due to the shorter travel

time and extensive reach. Traffickers smuggle wildlife and their derivatives through checked-in luggage and personal baggage, conceal wildlife contraband within passenger clothing, footwear, and other wearables, and the wrong declaration of protected species, all of which makes detection difficult for enforcement agencies. The newly developed resources under the project will prove useful for bridging such gaps."

Mr Yogendra Garg, Additional Director General, NACIN, added, "Customs need to continuously acquire new skills to keep pace with the latest trends in smuggling. Training tools and resources are thus crucial for upscaling their skills to detect crime. Also, there is a dire need to create awareness about emerging issues like wildlife crime from time to time. We at NACIN are glad that a dedicated effort for curbing wildlife trafficking through airports has been initiated through this project."

Mr Ravi Singh, Secretary-General & CEO, WWF-India, said, "Wildlife needs our support now, more than ever due to the increasing threats caused by human interventions, climate change, and illegal wildlife trade. The new project engages with nodal agencies at airports and helps to increase the awareness and prevention of illegal wildlife trade."

Visit [www.IWTKnowledgeHub.in](http://www.IWTKnowledgeHub.in) for more information about the new tools.



## B2. FOREST OFFICIALS UNDERGO TRAINING TO STRENGTHEN SKILLS IN WILDLIFE LAW ENFORCEMENT

The forest officials of Tamil Nadu, Arunachal Pradesh and Bihar underwent rigorous training to update their knowledge and skills for curbing wildlife crime. These training workshops were organised to enhance their understanding of the illegal wildlife trade and strengthen skills in species identification, wildlife crime scene investigation, wildlife evidence collection, and the Wildlife (Protection) Act, 1972.

**1. Mudumalai Tiger Reserve:** The capacity-building workshop in Mudumalai Tiger Reserve (MTR) was organised on 07-08 April 2022 by TRAFFIC's India office with the support and collaboration of Mudumalai Tiger Reserve (MTR), Tamil Nadu Forest Department (TNFD), at Teppakadu Range, MTR. It was attended by over 40 forest officials from the region. Mr Rajmohan, Deputy Conservator of Forests, Pudukkottai; Mr Chandrasekhar, Retd Deputy Conservator of Forest (DCF), Tamil Nadu Forest Academy (TNFA); Mr Mradraswamy, Retd Divisional Forest Officer (DFO), TNFD; and Mr S.V. Sheshadri, Retd Assistant Director, Wildlife Crime Control Bureau (WCCB), and TRAFFIC's India Office conducted the specialised training.

MTR is part of the Nilgiris Biosphere Reserve. It connects with the Bandipur Tiger Reserve, Karnataka, in the northwest; Wayanad Wildlife Sanctuary, Kerala, in the Southwest; and Sathyamangalam Tiger Reserve, Tamil Nadu, in the northeast. Together these reserves form a large contiguous forest known to support many endemic and threatened wildlife species, including the Bengal Tigers and Asian Elephants.

**2. Valmiki Tiger Reserve:** The capacity-building workshop in Valmiki Tiger Reserve was organised on 14-15 March 2022 by TRAFFIC's India Office in collaboration with WWF-India and the Bihar Forest Department at the Mangruha, Valmiki Tiger Reserve. Over 50 forest officials of Valmiki Tiger Reserve attended the training. Dr M. Karikaran, Scientist, Indian Veterinary Research Institute (IVRI); Dr Sandeep Kumar Gupta from Wildlife Institute of India (WII), and TRAFFIC personnel planned and conducted the training sessions.

Valmiki Tiger Reserve forms the easternmost limit of the Terai Forests in India and is located in the India-Nepal transborder area. It is contiguous with Nepal's Chitwan Tiger Reserve and Parsa Tiger Reserve. It supports many endangered species such as tigers, Asian elephants, the



© TRAFFIC

Greater One-horned Rhino, wild dog, and serow, to name a few. Due to the open porous borders, the area is under constant pressure from transnational organised wildlife crime syndicates.

Valmiki Tiger Reserve recently recruited many field forest officers. It was an opportunity to orient and train these new and existing officers in various aspects of wildlife law enforcement, including species identification in illegal wildlife trade, wildlife crime scene investigation, and evidence collection.

**3. Itanagar, Arunachal Pradesh:** The capacity-building workshop in Itanagar, Arunachal Pradesh, was organised on 10-11 May 2022 by TRAFFIC's India office with the support and collaboration of the Arunachal Pradesh Forest Department at the Forest Secretariat, Itanagar. It was attended by over 40 forest officials from the state.

Mr Agni Mitra, Regional Deputy Director, Wildlife Crime Control Bureau (WCCB), Mr C.P. Sharma, Senior Technical Officer, Wildlife Institute of India; Mr Samir Majumdar, Advocate and experts from TRAFFIC's India Office had planned and conducted the specialised training.

Arunachal Pradesh is known for its rich diversity that supports endemic and endangered species such as the Bengal Tigers, Asian Elephants, Snow Leopard, Clouded Leopard, orchids, and many other plant species. Its strategic location makes it vulnerable to cross-border wildlife trafficking. Therefore it is necessary to enhance wildlife law enforcement to curb wildlife crime.

## B3. WILDLIFE SENSITISATION PROGRAMME ORGANISED FOR MEGHALAYA JUDICIARY



© Meghalaya State Judicial Academy

In India, the conviction rate for wildlife crime cases is reportedly low. This is due to multifaceted reasons starting from investigation to conviction. Therefore, sensitisation and orientation of judicial officers about the gravity of wildlife crimes and their impact on our future are crucial to engaging their support.

Keeping this in mind, TRAFFIC, Centre of Environmental Law, WWF-India, and the Meghalaya State Judicial Academy organised a sensitisation and an orientation programme on Forest and Wildlife Conservation Laws for the Judiciary in Meghalaya on 25-26 June 2022 at the High Court of Meghalaya, Shillong.

Over 40 judicial officers, including the High Court and District Court Judges of Meghalaya, together with the Meghalaya Forest Department, represented by Mr S M Sahai, Principal Chief Conservator of Forests (PCCF)-Wildlife and Chief Wildlife Warden, Meghalaya, and Mr MBK Reddy, Addl. Principal Chief Conservator of Forests (APCCF)-Wildlife, Meghalaya attended the programme.

Hon'ble Justice Madan B. Lokur, Dr Saket Badola, Conservator of Forest, Uttarakhand Forest Department; Mr ADN Rao, Senior Advocate, Supreme Court of India, Prof (Dr) Archana Negi, Associate Professor, JNU, and Ms Moulika Arabhi, WWF-India led the sessions that were designed to include case studies and discussion exercises.

In the presidential address, Hon'ble Justice Sanjib Banerjee, Chief Justice, High Court of Meghalaya, said, "Laws not only need to be made but also need to be implemented". He shared insights from various judgments where the Judiciary's actions enormously impacted the restoration of nature. Hon'ble Justice Banerjee also

praised the initiatives by NGOs to interact with the judiciary to raise awareness about wildlife crimes. Dr Saket Badola, Conservator of Forest, Uttarakhand Forest Department and former Head of TRAFFIC's India office, stressed issues related to poaching and wildlife crime by providing an overview of the drivers and emerging challenges of the illegal wildlife trade, the role India plays as a source country for derivatives in the illicit wildlife trade, and its recent emergence as a demand country. Dr Badola also provided an insight into the illegal wildlife trade scenario in northeast India and its emergence in the trafficking routes of exotic species, reflected by seizures in different states.

Mr ADN Rao, Senior Advocate, Supreme Court of India, in his session on 'Courts on Forest and Wildlife: Legal and policy overview', discussed the Wildlife (Protection) Act, 1972 and the concept of Protected Areas and eco-sensitive zones. He discussed the different legal and environmental issues in India. He also brought forward many pivotal environment-related cases and the impact of the judgements.

Ms Moulika Arabhi, Centre for Environment Law, WWF-India, presented an overview of wildlife legislation through Acts and jurisprudence. She also gave an overview of India's Wildlife (Protection) Act and its various amendments.

In his address, Justice Madan Lokur highlighted the various principles that served as the basis for important judgments propounded by the Hon'ble Supreme Court of India to strengthen environmental jurisprudence and sustain human rights for a healthier environment. He shared detailed insight into many landmark judgments by the Hon'ble Supreme Court of India.

Northeast India is often targeted by poachers and wildlife traffickers for its abundant wildlife and forest reserves. Therefore sensitisation and support of the judicial system in the region was crucial.

The programme is part of a continuous endeavour by TRAFFIC and WWF-India to work with the judiciary to gain their support for wildlife conservation and protection. Similar orientation and sensitisation programmes have been organised in Maharashtra, Mizoram, Karnataka, Goa, Jammu and Kashmir, among other states.



## B4. OWL PROTECTION GETS NEW WINGS: NEW IDENTIFICATION TOOLS AVAILABLE



Owls play an essential ecological role in our ecosystem. They enhance agricultural productivity by keeping a check on rodent populations. However, owls are often found in the illegal wildlife trade in India due to various superstitions and taboos attached to them. They are trapped in large numbers for sacrifice and use in superstitious rituals often promoted by local mystic practitioners and these sinister activities peak around the festival of Diwali.

To strengthen owl protection in India, TRAFFIC and WWF-India launched new identification (ID) tools in the form of ID cards on 3 March 2022 on the occasion of World Wildlife Day by Mr Bharat Jyoti, Director-IGNFA; Dr AJT Johnsingh, Eminent Wildlife Scientist; Mr Ravi Singh, SG & CEO, WWF-India; Ms Nidhi Srivastava, Principal, CASFOS; and Dr Saket Badola, Head, TRAFFIC India at CASFoS (Central Academy for State Forest Service), Dehradun.

The owl identification cards enable law enforcement authorities to accurately identify 16 commonly found owl species in the illegal wildlife trade. The ID cards are available in English and Hindi and distributed widely among wildlife law enforcement agencies across India. Authored by Dr Saket Badola, IFS, Former Head of 'TRAFFIC's India office, and Dr Merwyn Fernandes, Coordinator, 'TRAFFIC's India office, the new ID tools provide essential information related to the 'species' legal status, habitat, and distribution. They provide valuable tips on identifying the owls at the species level and highlight common threats.

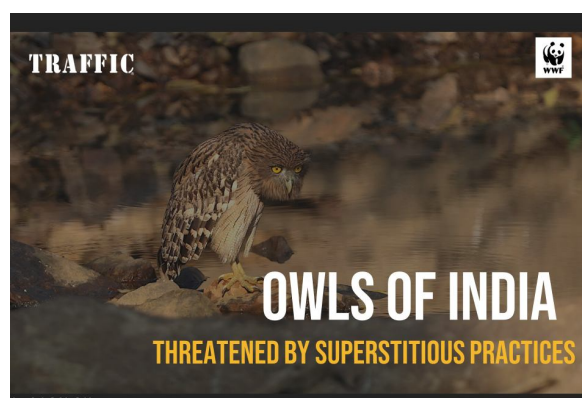
Since owl trafficking peaks around the festival of Diwali, TRAFFIC and WWF-India also released a short film –

*Threatened by superstitious practices: Owls of India* – to highlight the illegal trapping and trade of owls in India.

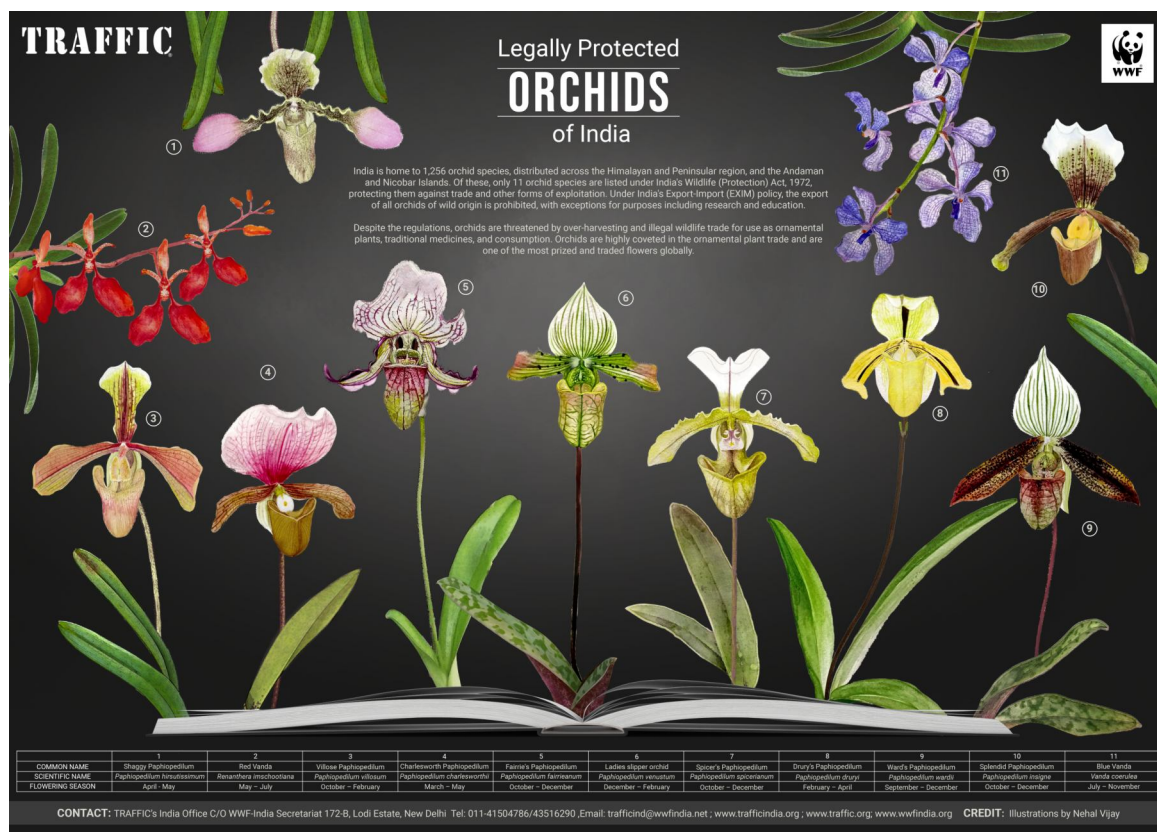
India is home to about 36 owl species, all protected under the Wildlife (Protection) Act, 1972, making their hunting, trade, or any other use a punishable offence. All owl species found in India are also listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which restricts their international trade.

Last year, on International Owl Awareness day, TRAFFIC created and released an informative poster, 'Imperilled by illegal wildlife trade: Owls of India' in English on 16 such owl species commonly found in illegal wildlife trade which was translated into Hindi and shared with enforcement agencies this year.

Owl ID cards, posters and film are available at [www.trafficindia.org](http://www.trafficindia.org)



# B5. INDIA'S ORCHIDS IN ILLEGAL WILDLIFE TRADE: FACTSHEET AND POSTER LAUNCHED



Globally, orchids are the second-largest family of flowering plants and have some of the most prized and traded flowers. India is home to about 1256 orchid species, of which 307 species are endemic to the country.

Illegal harvesting and overexploitation of orchids for ornamental plants, traditional medicine, and consumption in domestic and international markets is a significant increasing threat to these plants in the wild. Protected species of orchids such as Blue Vanda and Ladies Slipper have been found in wildlife seizures across India.

In order to highlight the threat to orchids and engage with stakeholders to strengthen protection and conservation measures, TRAFFIC and WWF-India released a new factsheet - *Orchids: Factsheet on 'India's orchids in illegal wildlife trade'* - on the *International Day for Biological Diversity* in May. The factsheet is a compilation of beautiful orchid images and general information about the species, interesting facts, legal status, and threats from the illegal wildlife trade.

Also released, ahead of *Save the Himalayas Day* in September, was a new illustrative poster on 11 protected orchid species of India. The new poster, "*Legally Protected Orchids of India*" combines beautiful illustrations of orchid flowers and related information and has been designed to aid enforcement agencies to identify orchid species in the illegal trade.

Both the poster and the factsheet aim to create awareness about orchids among students, educators and the general public.

Mr Ravi Singh, Secretary General & CEO, WWF-India, said, "Orchids are found throughout the Himalayan region of India. Time and again, new orchid species are discovered in the region, reflecting the hidden trove of floral treasures of the Himalayas. Conservation measures in the Himalayan region are key to conserving myriad species, including orchids and the ecosystems they represent".

Dr Merwyn Fenerandes, Coordinator, TRAFFIC's India Office, further added, "Such vast orchid diversity, unsustainable harvesting practices and illegal trade coupled with limited protection measures and lack of awareness makes the future of orchids a serious concern. By releasing the factsheet and identification poster, our joint efforts to stop the illegal orchid trade gets now a strong and considered boost."

Download the factsheet at [https://wwfin.awsassets.panda.org/downloads/final\\_orchid\\_factsheet\\_2022.pdf](https://wwfin.awsassets.panda.org/downloads/final_orchid_factsheet_2022.pdf) and the poster at <https://www.wwfindia.org/?21122/protected-orchids-of-india>



## B6. SHINING LIGHT ON THE INDIAN SPINY-TAILED LIZARD IN ILLEGAL TRADE: NEW FACTSHEET AVAILABLE

Indian Spiny-tailed Lizard *Saara hardwickii*, one of 230+ lizard species found in India, has been a silent victim of illicit wildlife trade activities for too long. This herbivorous, solitary, burrow-dwelling reptile found in the arid and semi-arid regions of north-western India is targeted for its meat consumed as a delicacy by locals and for the oil obtained from its skin and tail that is sold as a cure for various ailments.

TRAFFIC and WWF-India's latest Factsheet on *Indian Spiny-tailed Lizard in illegal wildlife trade* released in July 2022 highlights its ongoing illicit trade and provides information about the species to raise awareness and direct efforts toward its protection. Designed primarily for the enforcement agencies and the general public, the Factsheet aims to clear misconceptions about the species and its illicit use while raising concerns about its growing threats.

"Too often, the limelight is on charismatic wildlife species pulling most conservation efforts towards them. However, it is crucial to pay attention to many lesser-known, yet, ecologically important wildlife species like the Indian Spiny-tailed Lizard that are often heavily trafficked, before they become extinct in the wild," said Dr Merwyn Fernandes, Coordinator, TRAFFIC's India Office.

Mr Ravi Singh, Secretary General & CEO, WWF-India adds, "Creating awareness on the Indian Spiny-tailed Lizard is a step towards its protection and conservation. This species is under threat, and the gradual depletion of its numbers will lead to long-term negative effects. We hope to lead on the message of its conservation."

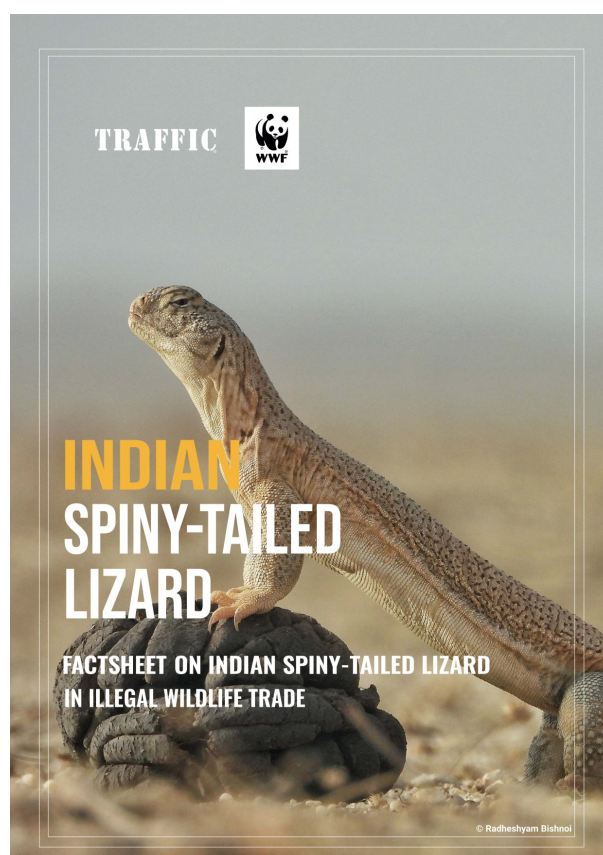
Indian Spiny-tailed Lizard is listed in Schedule II of the Wildlife (Protection) Act, 1972, which prohibits its hunting, trade or any other form of exploitation. It is locally extinct in Uttar Pradesh, and the population in Madhya Pradesh is declining. Presently, the species is primarily restricted to the desert regions of northwest India.

Despite the legal protection, the Indian Spiny-tailed Lizard is targeted by poachers and wildlife traffickers across its range in India. Rajasthan has emerged as a central hub for poaching and trading of the Indian Spiny-tailed Lizard from where derivatives (such as oil) are smuggled to Bihar, Karnataka, Maharashtra, New Delhi, Punjab, and Uttar Pradesh. Live Indian Spiny-tailed Lizards have been

found in seizures reported at Desert National Park in Rajasthan. Other seizures of both live and dead lizards and their products have been reported in Bangalore (Karnataka) and Mumbai (Maharashtra). Both locations are outside the species' natural range, indicating that the demand for its product is driving its trafficking.

"Besides the illegal wildlife trade, habitat loss and alteration mainly due to urbanisation, canal irrigation, afforestation, agricultural expansion, and large-scale infrastructure projects also pose a significant threat to the future of the Indian Spiny-tailed Lizard" highlights TRAFFIC's new Factsheet.

Download the factsheet at <https://www.traffic.org/publications/reports/factsheet-on-indian-spiny-tailed-lizard-in-illegal-wildlife-trade/>



## B7. DUDHWA TIGER RESERVE GETS NEW AWARENESS STANDEES ON WILDLIFE SPECIES IN ILLEGAL TRADE

Dudhwa Tiger Reserve, located in Uttar Pradesh, is home to various endangered wildlife, including the Bengal Tiger, Greater one-horned Rhino, Asian Elephant, otters, Barking Deer, Fishing Cat, monitor lizard, King Cobra, mongoose and many endangered bird species. This region lies near the Indo-Nepal border, making it highly vulnerable to poaching and wildlife trafficking.

With support from Dudhwa Tiger Reserve, TRAFFIC and WWF-India, have installed five life-sized standees at strategic locations in and around the Reserve to raise visitors' awareness of the critical species commonly found in the region's illegal wildlife trade and discourage them from buying products made from them.

The standees highlight general species information and the threats of wildlife trafficking to the Indian Tiger, Greater One-horned Rhino, pangolins, Asian Elephant and parakeets.



## B8. INDIA'S WILDLIFE SNIFFER DOG SQUAD TO EXPAND: SIX YOUNG DOGS BEGIN TRAINING



© TRAFFIC

India's wildlife sniffer dog force trained under TRAFFIC and WWF-India's programme will soon get six recruits as a new group begins training. The 10<sup>th</sup> batch of the programme with six young German Shepherd dogs, ranging between six and nine months old, and their 12 handlers have begun their seven-month course at Basic Training Centre, Indo-Tibetan Border Police Force (BTC-ITBP) camp in Panchkula, Haryana.

On completion of training, the wildlife sniffer dog squads will join the forest departments of Karnataka (4), Bihar (1), and Madhya Pradesh (1), taking the total number of wildlife sniffer dogs trained under TRAFFIC and WWF-India's programme to 94.





© TRAFFIC

The illegal wildlife trade has endangered the existence of many wild species across the globe. In India, it includes an array of wildlife products and derivatives such as mongoose hair, snake skins, rhino horn, tiger and leopard parts, elephant tusks, shahtoosh shawl, pangolin scales and much more. Wildlife law enforcement practices are critical in containing this threat, and the use of wildlife sniffer dogs for wildlife crime prevention and detection has been a game changer in India.

Mr Ravi Singh, Secretary General & CEO, WWF-India, said, "Using detection dogs in law enforcement is a proven practice as dogs are competent in combatting crimes of varied nature because of their agility and excellent olfactory senses. TRAFFIC and WWF-India's wildlife sniffer dogs, popularly known as Super Sniffers, play a crucial role in detecting and curbing illegal wildlife trade in India."

"With just two wildlife sniffer dog squads in 2008, our programme has successfully trained 88 dogs, and now six more are under training. Twenty-one states and union territories have participated in this programme and have deployed trained sniffer dog squads to fight against wildlife crime. The programme has grown to become the largest in the country," added Dr Merwyn Fernandes, Coordinator, TRAFFIC's India office.

Mr Ishwar Singh Duhan, Inspector General, ITBP, Director, NTCD&A (National Training Centre for Dog & Animals), Panchkula, said, "The training programme for wildlife sniffer dog squads has been carefully designed to

accommodate both basic obedience and detection skills specifically for detecting and curbing illegal wildlife trade in India."

He explained, "The dogs are being trained using the latest training tools to master sniffing and tracking skills for the scent of various wildlife products. Training is being scientifically conducted using modern conditioning techniques, including positive reinforcement through food and play rewards. Also, dogs will be exposed to various real-life search scenarios in populated and forest areas. We are confident that these new wildlife sniffer dogs will continue to help the enforcement officials curb illegal wildlife trade on completion of training."

The training of the 10<sup>th</sup> batch of six dogs at ITBP started on 5 September 2022. The first few weeks of the training will focus on developing an emotional and trusting bond between the dog and the handler, which is crucial to becoming a successful wildlife sniffer dog. Later, the dogs will learn sniffing and tracking skills and be trained to detect tiger and leopard skins, bones and other body parts, bear bile, red sanders, and other illegal wildlife products.

## B9. CANINES FOR FELINES: THE WILDLIFE SNIFFER DOGS COUNTERING TIGER CRIME IN INDIA



© TRAFFIC

India is home to the Bengal Tiger *Panthera tigris tigris*, an endangered sub-species within the genus *Panthera*. Tigers are a significant part of the country's identity and maintain the balance of the ecosystem as an apex species.

Since the first assessment in 2006, the tiger population in India has increased from 1411 to 2967 individual tigers in the latest assessment 2018-19 (Jhala, et. al., 2020).

Over the years, India has taken many dedicated conservation steps to safeguard the future of wild tigers, including the launch of "Project Tiger" in 1973, dedicating about 2.21% of its geographical area (72,749 km) as Tiger Reserves. Currently, there are 52 Tiger Reserves spread across 18 states. These designated Protected Areas help preserve the wild tiger population by keeping their prey base and habitat stable. However, they are vulnerable to the poachers that target tigers to meet the international demand for their derivatives.

To safeguard habitats and empower law enforcement agencies to mitigate poaching and illegal wildlife trade effectively, TRAFFIC India Office, with support from WWF-India, has launched several initiatives and projects since its inception in India in 2007. One of the pioneering programmes of TRAFFIC in this region, is its wildlife

sniffer dog training programme. The programme was launched in 2008 and provides expert training for wildlife sniffer dog squads to detect and deter wildlife crime.

Super sniffers have been instrumental in solving numerous tiger poaching cases and have helped locate and recover carcasses and derivatives of tigers while providing essential leads to suspects.

TRAFFIC works with the state forest departments and other law enforcement agencies', encouraging them to deploy wildlife sniffer and tracker dog squads for patrolling, conducting searches, including the detection of traps set up by tiger poachers, and assisting in wildlife seizures within their jurisdictions.

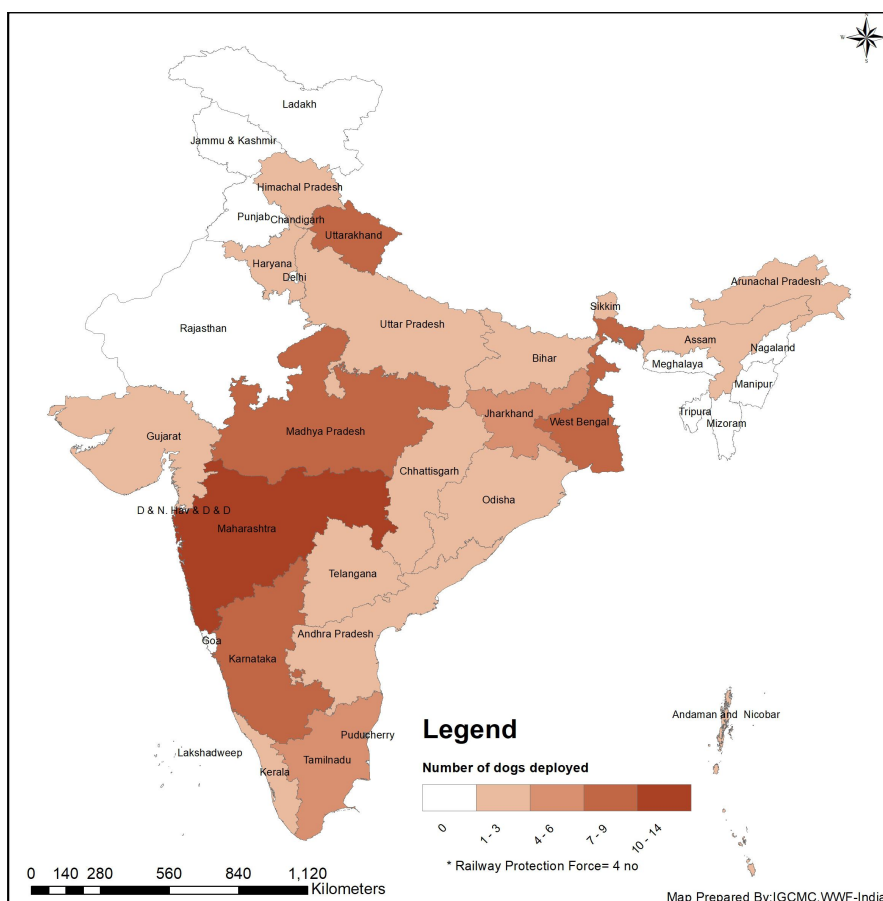
The programme started with just two dog squads and has now grown to include 88 wildlife sniffer dog squads, trained in nine batches and deployed to 21 States and Union Territories (UT) of India. Of these, 41 wildlife sniffer dog squads are working on more than 30 Tiger reserves in 15 states and UTs of India and have been part of the Tiger Strike Force (Madhya Pradesh) and Special Tiger Protection Force (Karnataka).

Under the programme, the young dogs of about six to nine months are provided training along with two handlers nominated by the participating enforcement agency. The dog breeds, such as German Shepherds, Belgian Malinois, and Labradors, undergo six to nine months of handler training before they graduate as a wildlife sniffer dog squad. The handlers from the forest departments usually serve at the rank of forest guard or forest watcher or are of an equivalent level in other participating enforcement agencies.

TRAFFIC engages with three main training centres:

- the National Level Government Dog Training Institute of National Training Centre for Dog (NTCD), BSF Academy, Tekanpur Gwalior, Madhya Pradesh
- the 23rd Battalion Special Armed Force Police Dog Training Centre, Bhopal, Madhya Pradesh
- the National Dog-training Centre at Indo-Tibetan Border Police camp, Panchkula, Haryana





*Deployment of TRAFFIC and WWF-India's wildlife sniffer dogs across India*

These wildlife sniffer dogs or popularly known as Super Sniffers, have been deployed by Andhra Pradesh, Andaman & Nicobar Islands, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Sikkim, Tamil Nadu, Telangana, Uttarakhand, Uttar Pradesh, West Bengal, and Odisha.

In 2020, the Super Sniffers also became part of the Railway Protection Force to assist in tracking and detecting the smuggling of wildlife contraband through the extensive railway network of the country. Since their deployment, these wildlife sniffer dog squads have assisted in more than 400 wildlife seizures in their divisions, including the National Parks, Tiger Reserves, and Wildlife Sanctuaries.

In Maharashtra, Dog Daisy and handler Aakash M. Jakhal and Dog Raja and handler M A Ansari and Pravin Kumar have been doing exemplary work to protect wild Tigers from poachers and wildlife smugglers. A similar contribution is being made by Dog Simba and handler Suresh in Chhattisgarh; Dog Nirman and handler Raj Kishore Prajapati and Dog Jimmy and handlers Kailash Charar and Roopdash Khairwar in Madhya Pradesh; Dog Rana and handler Prakash Somaning Honnakore and Kalaklakar Mage in Karnataka and Dog Offer and handler P Vadivilan and V. Sasidharan in Tamil Nadu.



In 2019, to celebrate and reward the contribution of Super Sniffers and their handlers towards the conservation of tigers, TRAFFIC and WWF-India organised the Canines for Felines competition, concluding on the Global Tiger Day on 29 July 2019. The winner of the competition was the Super Sniffer Nirman, stationed at Satna Division in Madhya Pradesh, who, along with his handler, had assisted in more than seven tiger-related cases. The runner-up,



© TRAFFIC

Myna, and her handlers stationed in Indore, Madhya Pradesh, had helped in three tiger cases. Both are part of the Tiger Strike Force of the Madhya Pradesh Forest Department.

It is a consolation to know that the tigers of India have a loyal squad of allies in the Super Sniffers. TRAFFIC and WWF-India are helping train the 10<sup>th</sup> batch of the wildlife sniffer dog programme and hope to bring more paws on deck to keep the tigers roaring in the jungles of India.

## REFERENCES:

- Jhala, Y.V., Qureshi, Q. and Nayak, A.K. (eds) 2020. *Status of Tigers, co predators and prey in India*, 2018. National Tiger Conservation Authority, Government of India, New Delhi, and Wildlife Institute of India, Dehradun.
- Sarkar, M.S., Amonge, D.E., Pradhan, N., Naing, H., Huang, Z. and Lodhi, M.S., 2021. A Review of Two Decades of Conservation Efforts on Tigers, Co-Predators and Prey at the Junction of Three Global Biodiversity Hotspots in the Transboundary Far-Eastern Himalayan Landscape. *Animals*, 11(8), p.2365.
- Bergevin, C., Walsh, E.J., McGee, J. and Shera, C.A., 2012. Probing cochlear tuning and tonotopy in the Tiger using otoacoustic emissions. *Journal of Comparative Physiology A*, 198(8), pp.617-624.
- Jhala, Y. V., Qureshi, Q., & Gopal, R. 2015. *The status of Tigers in India 2014*. National Tiger Conservation Authority, New Delhi and Wildlife Institute of India, Dehradun, 28.
- Star of Mysore, 2020. 'Tiger's Death At Nagarhole: A Case Of Poaching. [online] Available at: <<https://starofmysore.com/Tigers-death-at-nagarhole-a-case-of-poaching/>> Accessed 14 April 2022.
- Karmakar, R., 2019. Quarmy the dog bags honour for taking on hunters. *The Hindu*, [online] Available at: <<https://www.thehindu.com/news/national/quarmy-the-dog-bags-honour-for-taking-on-hunters/article28752079.ece?homepage=true&fbclid=IwAR3zGb747RsGZo5UEOJeyYrWpTvuVKnbvGSTRapV8KK-6SoYVv3trcxRoE>> Accessed 14 April 2022.



# C

# GLOBAL SCAN



## C1. SIX TOP NGO'S COMMITMENT TO A COOPERATIVE APPROACH TO SAVING THE TIGER- A SHARED VISION

*As the Year of the Tiger began, a coalition of six top NGOs who have already committed to a cooperative approach to saving the iconic big cat shared their vision. Authors from IUCN, FFI, WCS, WWF, TRAFFIC and Panthera argued that ambition must increase and funders must support collaborative efforts.*

In the past 12 years, tigers increased significantly in some areas but disappeared from others. Overall, this first phase of the Global Tiger Recovery Program showed that tiger numbers could be restored, but that progress is hard-won and fragile, and tiger conservation needs to be urgently strengthened to achieve long-term success. Therefore it is necessary to regroup and reassess strategy to build a more successful and collaborative effort with a clear vision that provides spatial prioritisation of where we need to focus for tigers and what specifically needs to be done to ensure the survival and recovery of viable, ecologically functional wild tiger populations across their historical range.

The Group highlights that back in 2010; there was no universal consensus on the best approaches for tiger conservation. There were debates in the scientific literature and in the halls of conferences and workshops, some friendly, some heated. Of course, some debates continue, but now heading into the next 12 years of tiger conservation, there is clear consensus on many issues. Multiple models of success have similar and predictable parameters that can be emulated. There has been a convergence of thinking on the best approaches to tiger conservation.

Perhaps the most important learning from the past has been that tiger conservation cannot be considered or

executed as a single species conservation initiative but rather as a platform for addressing some of the major global concerns facing natural and human-dominated communities.

Perhaps because the tiger is such an iconic species, there has, up to now, been little attempt to place tiger conservation in the context of global concerns such as climate change, zoonotic diseases, and the destabilising effects of forest loss and ecosystem degradation. Far from being isolated and independent issues, these challenges are intricately linked, and success in any one arena requires a much more comprehensive approach.

In this context, at least in Asia, tigers can act as an umbrella species not just to protect other species, but to retain ecosystem integrity, stabilise climate, and promote a "One Health" strategy that recognises that human health, animal health and the health of the planet are inextricably linked. As such, tiger conservation provides a convenient and effective umbrella to tackle multiple threats potentially destabilising Asia's human and wildlife populations, which, despite holding about 60% of the world's human population, is still one of the most biologically diverse regions of the world.



© Dr Saket Badola

Collaboration is a critical component of conservation success. For instance, the NGO community has been known for its competitive nature within the conservation world, as many organisations seek support from the same funding sources. This ironically has sometimes led to a perverse focus on outcompeting other organisations rather than collectively achieving the aligned conservation goals. While competition can be a powerful and useful force leading to improvements in effort and strategic approaches, the competitive nature of funding for conservation can limit success by disincentivising collaboration between multiple organisations with varied strengths.

As a group of organisations that have worked for decades with partners to conserve tigers, the joint vision is for a long-term presence of viable and ecologically functional populations of wild tigers secured in their natural habitats, with representation and links across their indigenous range, respected and valued by neighbouring human communities and beyond, a magnificent symbol of nature in all its beauty, complexity and wonder for future generations.

The NGOs propose four primary goals over the next 12 years of tiger conservation:

- 1) secure and increase tiger numbers in all existing populations;
- 2) expand the range of tigers by managing environments to encourage expansion into new areas;
- 3) turn the tide by reintroducing tigers into countries and landscapes that have lost their tiger populations;

- 4) restore ecological diversity by recovering and sustaining tiger populations in all major ecological settings of the tiger's indigenous range.

To achieve these goals, the NGOs pledged support to help the range countries strengthen the Global Tiger Initiative by undertaking the following:

- Securing robust and sustainable long-term funding
- Collaboration resulting in a single voice for advocacy and investment in conservation interventions
- Support in securing key tiger areas
- Countering the threats from trade
- Enabling human-wildlife coexistence
- Sharing good practices in the development of green infrastructure.

The NGOs will also be imploring Governments of tiger range countries, donor organisations and the global public to understand that saving Tigers is about much more than saving a single species. It is about saving Asia – its abundance of resources, its climate, and the health of its people and other living inhabitants.

More at <https://www.traffic.org/news/shared-vision-for-the-future-of-an-iconic-cat-in-the-year-of-the-Tiger/>



# D

## TRAFFIC ALERTS



### D1. FOREST DEPARTMENT APPREHENDS SIX IN TIGER POACHING CASE AT NAGARHOLE TIGER RESERVE

In February 2022, the Karnataka Forest Department apprehended six people for trying to sell tiger skin, paws and claws in the buffer zone of the Nagarhole Tiger Reserve. Teams formed to investigate the case led to the arrest along with the remaining body parts of the tiger and other tools involved in the offence.

Last month, two nine-month-old tiger cubs were found dead in the DB Kuppe Wildlife Range of the Metikuppe Wildlife Subdivision in the Nagarhole Tiger Reserve. In April 2021, alleged poachers were caught with tiger and leopard skin from the Tiger Reserve.

<https://indianexpress.com/article/cities/bangalore/karnataka-forest-department-Tiger-poaching-nagarhole-reserve-7778103/>

### D2. THREE HELD WITH TIGER PARTS ALONG THE ARUNACHAL-ASSAM BORDER

In February 2022, the Wildlife Crime Control Bureau (WCCB), Guwahati, recovered multiple tiger parts, including the skin of an adult tiger, from an oil depot along the national highway at Banderdewa close to the Assam-Arunachal Pradesh border. Three persons were detained in connection with the recovery of the tiger parts. WCCB

sources said that four tiger canines, 18 tiger nails, bones and skull weighing 14.400 kg were also seized from the accused.

<https://www.eastmojo.com/assam/2022/02/08/teams-led-by-wccb-seize-royal-bengal-tiger-parts-3-detained/>

### D3. TIGER SKIN SEIZED FROM KEONJHAR DISTRICT OF ODISHA

In May 2022, the Keonjhar Forest Division team recovered a Bengal Tiger's skin and arrested one person. The skin, 7 feet in length, belonged to an eight-year-old tiger killed in the Rehana reserve forest of Anandapur Wildlife Division.

<https://www.newindianexpress.com/states/odisha/2022/may/21/poached- tigers-skin-seized-from-keonjhar-district-of-odisha-2456185.html>

## TRAFFIC ADDS.....

India is home to the Bengal Tiger *Panthera tigris tigris*. Tigers are widely distributed across India, from the Himalayas to the rainforests of southern Western Ghats and from the dry forests of Rajasthan to the moist forests of Northeast India.

Poaching is the most immediate threat to tigers in the wild besides habitat destruction and alteration. Almost every part of the tiger is found in the illegal wildlife trade. A study by TRAFFIC released in 2019 showed 2,359 tigers were seized from 2000 to 2018 across 32 countries and territories globally, resulting from 1,142 seizure incidents. The vast majority, around 95% of these seizures, were recorded in tiger range countries. With the world's largest wild tiger

population, India remained the country with the highest overall number of seizures and the most tigers seized, consistent with findings from previous years. It accounted for 40.5% of total incidents (463) and 26.5% of tigers seized (626).

Tiger is the apex predator of the ecosystem, and protecting it is crucial to safeguarding the forests and wildlife. Sustained efforts in the form of stringent enforcement initiatives to curb illicit trade within the country and across borders, habitat protection and restoration, and awareness generation are the only way forward.



© TRAFFIC



OCTOBER 2022

WORKING TO ENSURE THE TRADE  
IN WILD PLANTS AND ANIMALS IS  
NOT A THREAT TO THE  
CONSERVATION OF NATURE

TRAFFIC, India Office,  
C/o WWF-India Secretariat,  
172-B, Lodi Estate,  
New Delhi-110003

Tel: +91-11-41504786,  
Email: [trafficind@wwfindia.net](mailto:trafficind@wwfindia.net)  
For more information, please visit  
[www.trafficindia.org](http://www.trafficindia.org);  
[www.traffic.org](http://www.traffic.org)



**TRAFFIC**