



WWF & YOU

Building a living future



It's getting harder to find them.



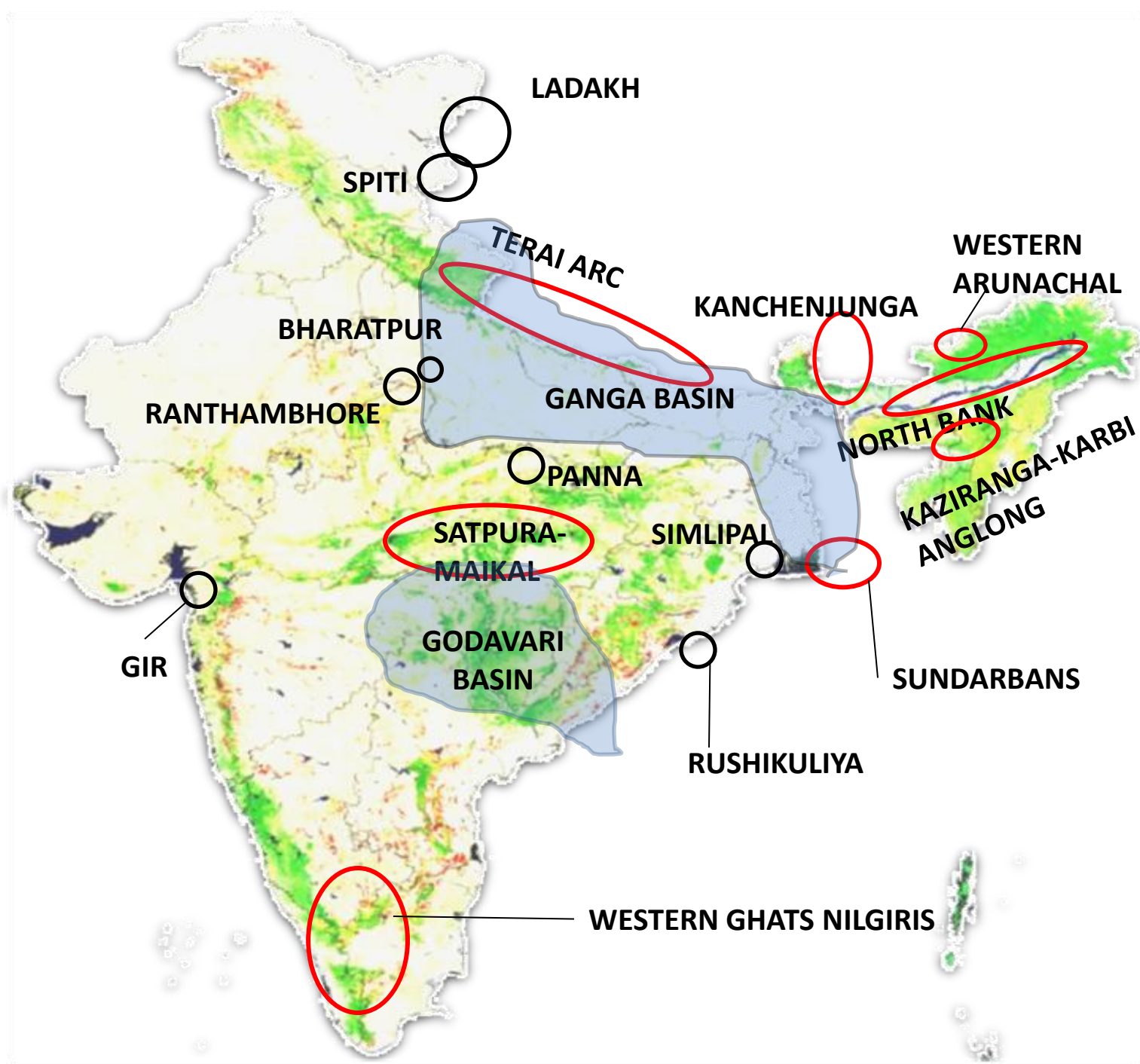
Conserving Priority Species

- Research & data collection
- Mitigating human-wildlife conflict
- Reducing poaching & wildlife trade
- Lobbying for policies supporting wildlife conservation
- Protecting priority species





Critical Landscapes





CONSERVATION INTERVENTIONS BY WWF- INDIA IN WESTERN GHATS NILGIRIS LANDSCAPE





WESTERN GHATS NILGIRIS LANDSCAPE

NORTHERN COMPLEX
Worlds single largest Asian
Elephant Population
Tigers strong hold

SOUTHERN COMPLEX

WAYANAD
WILDLIFE SANCTUARY

BANDIPUR
TIGER RESERVE

MUDUMALAI
TIGER RESERVE

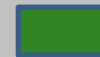
NILGIRI NORTH FOREST DIVISION

NILGIRI SOUTH
FOREST DIVISION

COIMBATORE
FOREST DIVISION

BILGIRIRANGASWAMY
TEMPLE
TIGER RESERVE

SATHYAMANGALAM TIGER RESERVE



FOREST DIVISIONS

PARAMBICULAM
TIGER RESERVE

ANAMALAI TIGER RESERVE

VAZHACHAL FOREST
DIVISION

ERAVIKULAM
NATIONAL
PARK

KODAIKANAL WILDLIFE SANCTUARY



WESTERN GHATS NILGIRIS LANDSCAPE

NORTHERN COMPLEX

- It has the single largest contiguous population of Asiatic elephants in its range and holds the key to the long term survival of the species.
- Over 6,000 elephants live in the Nilgiri and Eastern Ghats Landscape which spreads over an area of about 12,000km².
- Other large mammals found in the area are the **gaur, sambar and tiger**. The terrain of the landscape is mostly undulating with low hills.
- The area extends from the south of the **Brahmagiri hills in Karnataka through the Wayanad plateau into the northern Nilgiri hill slopes and the Mysore plateau which links up to the Sigur plateau and the Moyar river valley.**
- The Moyar valley rises up the slopes of the Eastern Ghats leading into the Thalamalai plateau going up to the east of the Biligirirangan range into Bargur, Sathyamangalam and Madeshwaramalai up to the Cauvery River.



SOUTHERN COMPLEX

- The **Southern Western Ghats (SWG)** cover an area of **7000km²** through the states of Kerala and Tamil Nadu and harbour a very rich floral and faunal biodiversity.
- It forms one of the **largest contiguous blocks of 'good' forest** cover in the Southern Western Ghats.
- This region **harbours high levels of endemism** and **over 15 per cent is under the Protected Area network**.
- Some of the important and **unique habitat types** found here include **wet evergreen forests and sholas** in the higher elevations.
- The Southern Western Ghats is also a priority terrestrial and freshwater ecoregion of the **WWF global programme with the entire Western Ghats complex identified as a Global Ecoregion 200**.



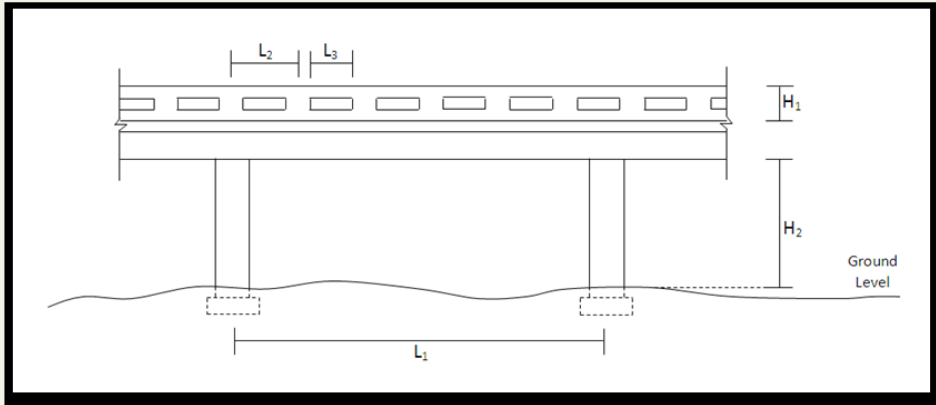
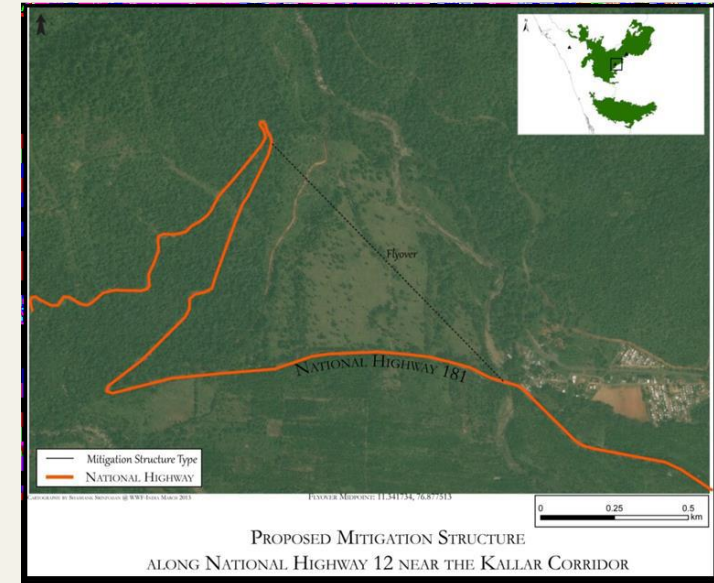
Tiger monitoring







Securing corridor



Factsheet prepared and issue raised at inter-department meeting

Mitigation structure design inputs

Monitoring corridor functionality using camera traps



Monitoring corridors





Radio collaring of elephants



Non Musth: 92.2 km²

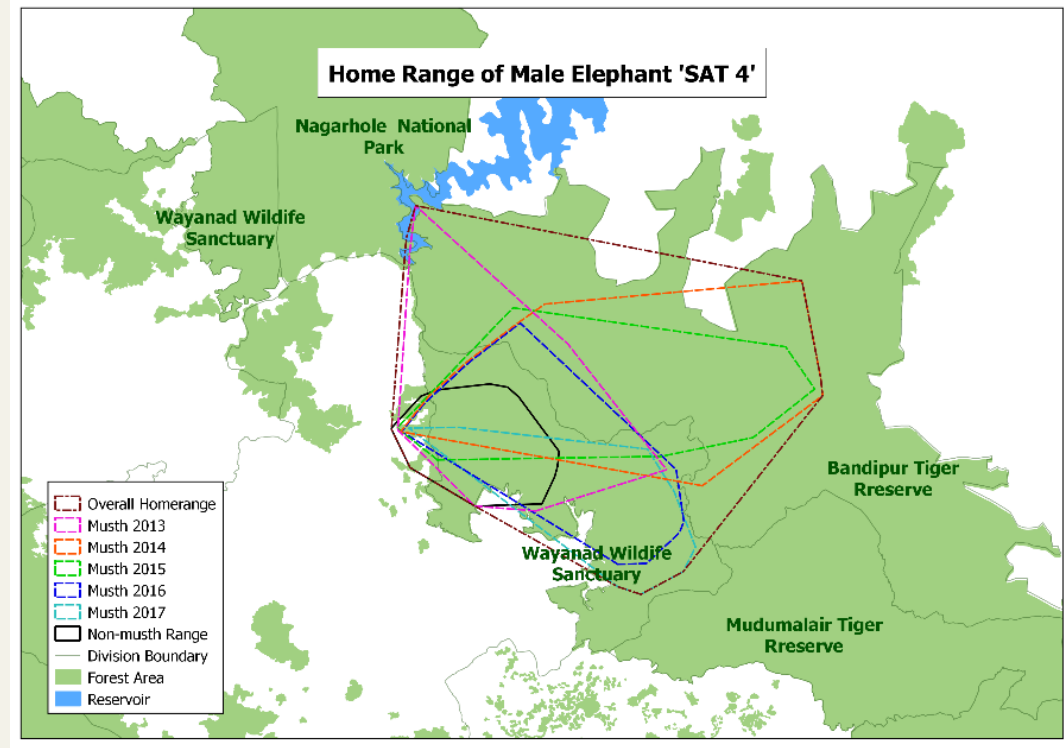
Musth 2013: 264.2 km²

Musth 2014: 356.2 km²

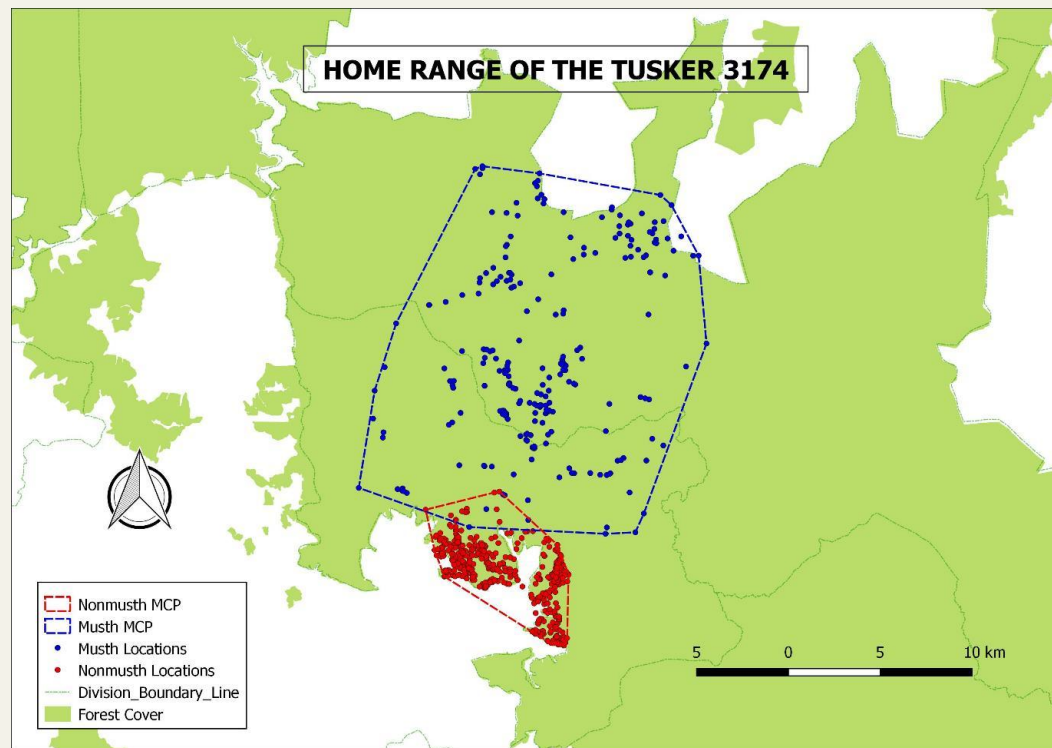
Musth 2015: 276.2 km²

Musth 2016: 214.2 km²

Musth 2017: 146.4 km²



Overall Homorange: 720.6 km²



Non Musth 39.4 sq. km.
Musth: 288.32 sq. km.



Innovations in Fencing Designs for Site-specific Challenges



Above – Hanging Fences – for streams and uneven terrain

Top Right – Tentacle fences – for preventing stubborn males from reaching the main fence structure

Right – Grid fences – for weak spots and undulating terrain



EARLY WARNING SYSTEM



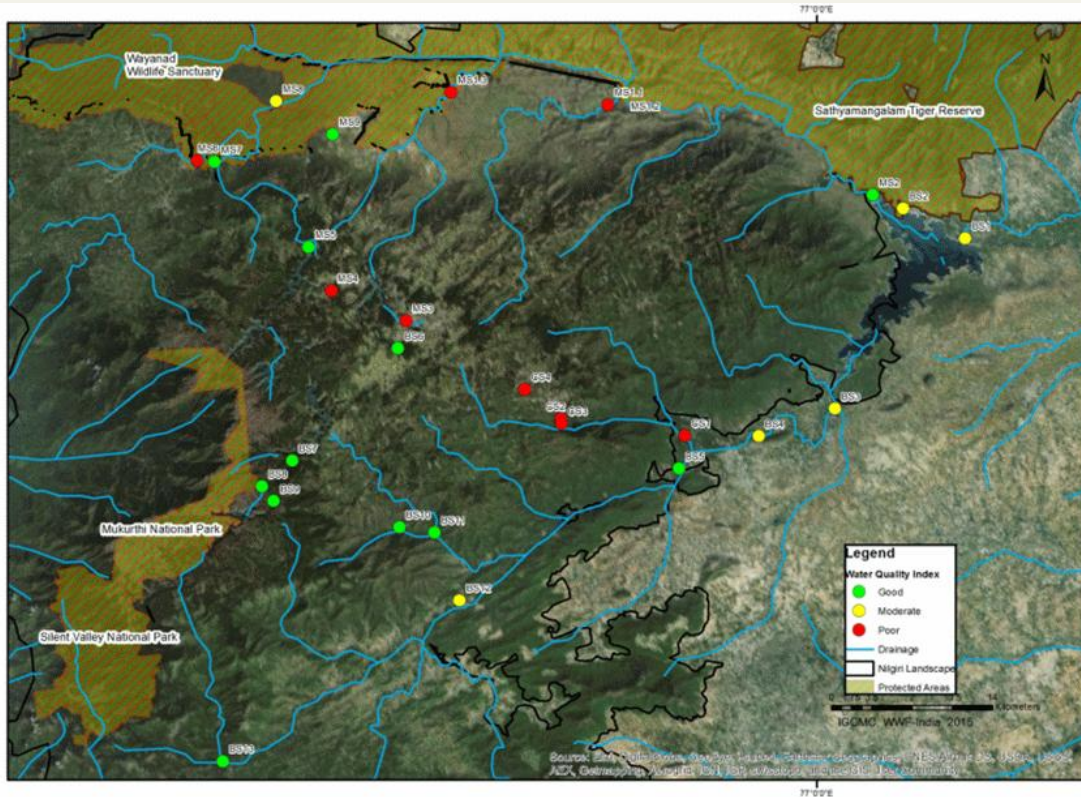


NILGIRI TAHR MONITORING





River Basin Management in Moyar and Bhavani



Findings of water quality assessment presented to District Administration, PCB and other stakeholders

DC to form committee to oversee mitigation actions by industry and municipalities in time-bound manner

WWF to continue water quality monitoring

Preparing basin security plan with partners and stakeholders



Training and support to FD



Over 1876 participants (frontline forest staff) from 13 Forest Divisions trained on various aspects

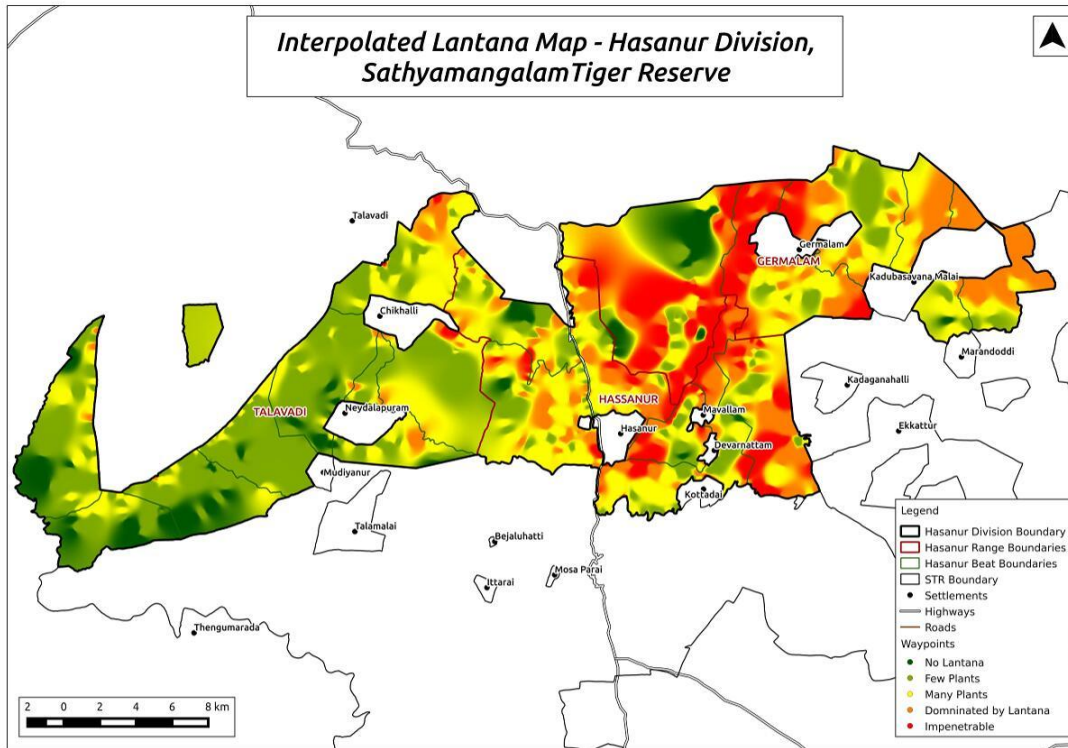
Infrastructure and material support provided to 15 Forest Divisions

Functionality of anti-poaching camps improved contributing to overall stay at site and patrolling effort (patrolling and watering vehicles, field gear, field equipment)





Invasive species management



Report with Shola Trust presented to Forest Department

Developing partnership with ATREE and Keystone Foundation for participatory mapping of invasives



Forest Rights Act implementation

Facilitated setting up 400 sq.km CFR Area in Vazhachal FD. Preparation of management plan and capacity building of Sangham.

Facilitated CFR claims process in Parambikulam Tiger Reserve; claim filed for 108 sq km CFR area

Initiated mapping and claims process in Silent Valley National Park with one settlement as model

Stakeholder consultation for Anamalai Tiger Reserve, orientation for communities and convening of gram sabhas





Community engagement





Energy interventions – Anamalai and Sathyamangalam TRs

Baseline survey on fuelwood use, preferred species, time allocation, indoor air pollution

Technical and implementation partner: TIDE, Sustaintech

Provision of improved cookstoves and training on building low cost model of improved cookstoves

25-30 percent efficiency as compared to traditional stoves

Significant reduction in indoor air pollution





Sustainable agriculture – Anamalai and Sathyamangalam TRs



- Partnership with Nammalvar Ecological Foundation
- Emphasis: chemical free agriculture, water conservation, pollinators, agro diversity
- Homestead gardens to address loss of food diversity and household nutrition
- Exposure visits to seed collectives and organic farmer groups



Environmental education – camps and trails





Pandiyar to Naduvattam

- It is surrounded with tea gardens, evergreen / shola forest patches. **The walk will be slippery and leeches area. One has to have their leech proof socks and salt / Dettol to apply for leeches. Tobacco ash or salt sprinkled on the leeches also works.**
- It is an area of landscape view situated in the upper plateau of Nilgiris. Sometimes raining. Wildlife in this **are- Nilgiri Langur, Common Langur, Barking deer, Wild dog, Wild pig, Gaur, Sambar and Nilgiri Tahr.**
- This area comes under part of **Mukurthi – Mudumalai corridor mainly for large carnivores.**



Naduvattam to Kargudi

- It is downhill. **Kargudi is located in Mudumalai TR.** This is an **elephant habitat**.
- **Deciduous forest** type with **thickets of lantana** cover.
- Other wildlife in this area **Chital, Sambar, Gaur, Elephant, Tiger, Leopard, Sloth bear, Common Langur, Malabar Giant Squirrel.**
- Mainly **need professional trackers or forest personnel accompanying** and walking in front in the **elephant field**.
- Avoiding **bright colour clothes**, maintain silence, avoiding **fragrances/ perfumes** is very important.



Kargudi to Vazhaithottam

- The vegetation in **Kargudi to Masinagudi** is **dry deciduous** and **Masinagudi to Vazhaithottam** is **dry thorn forests**
- **Elephant rich area. Visibility will be poor**
- **Theppakadu** of Mudumalai TR is nearer to Kargudi. **There is an elephant camp and Interpretation center at Theppakadu.**
- River Moyar flows along the Kargudi to Theppakadu area. You can see **Kurumba tribes** around Kargudi and Theppakadu region and **Irula tribes** around Masinagudi and Vazhaithottam region
- The **Segur Elephant Corridor** can be seen by climbing the **Vibhoothi hills** near **Bokkapuram**. The resorts built in elephant corridor can be seen.
- One should **have full sleeve dress so that you can avoid scratches from thorny plants especially lantana**. The habitat is with **full of lantana and Eupatorium (invasive alien species) understorey**
- Wildlife in this area are **Chital, Sambar, Black buck, Gaur, Elephant, Tiger, Leopard, Sloth bear, Common Langur, Malabar Giant Squirrel**. **Vulture** can be seen in a place called Jagalikadavu near Vazhaithottam.









Vazhaithottam to Sholur

- **Vazhaithottam** is present in the **foothill of Nilgiris** and **Sholur** is on the top of the blue mountain.
- In **Kalhatty slopes**, presently **Neelakurinji flowering** can be seen. **It is in the last stage now.**
- The **vegetation is dry thorn forest.**
- Wildlife in this area are **Chital, Sambar, Black buck, Gaur, Elephant, Tiger, Leopard, Sloth bear, Common Langur, Malabar Giant Squirrel.**
Vulture and Great pied hornbill can be seen.



Sholur to Parson's Valley

- The route lies completely in the **upper plateau of Nilgiris**
- **Shola patches, grasslands and large tracts of wattle and eucalyptus plantations** present in this region.
- Wildlife such as **Sambar, Indian Gaur, Nilgiri Langur, Common Langur, Feral buffalo, Wild dog** can be seen. **Tiger, leopard and sloth bear** is also present here.
- **No elephants**
- From Parson's valley, if we drive a little inside to Western Catchment (Mukurthi National Park), one can see a **herd of Nilgiri Tahr**.



Parson's Valley to Avalanche

- It is **complete shola / evergreen patches and patch of grasslands.**
- **Wattle and Eucalyptus plantations** which were **planted during British period** are seen
- There are **dams and reservoirs** like **Avalanche and Emerald**
- Chilling weather and sometimes raining.
- **Leeches area**
- **Nilgiri Tahr, Indian Gaur, Sambar deer, Barking deer, Tiger, Leopard, Sloth bear, Nilgiri Marten, Nilgiri Langur, Feral buffalo and Jackal** present in this area
- In Avalanche, **the Rainbow Trout fish (introduced by British)** can be seen in the **fish hatchery**
- Avalanche is a **good place for birding** - **Nilgiri Flycatcher, Nilgiri Laughing thrush, Nilgiri wood pigeon, emerald dove, grey headed canary flycatcher, rufous bellied short wing, verditor flycatcher, black and orange flycatcher, great tit, black bulbul, Nilgiri Pipit** among other birds



Avalache to Porthimund

- **Shola, evergreen, wattle plantation and tea gardens**
- **Dams and reservoirs and power houses present**
- **Nilgiri Langur, Sambar and Feral buffalo** can be sighted
- **Leeches area**
- **Chilling weather and sometimes raining**
- **a good place for birding - Nilgiri Flycatcher, Nilgiri Laughing thrush, Nilgiri wood pigeon, emerald dove, grey headed canary flycatcher, rufous bellied short wing, verditor flycatcher, black and orange flycatcher, great tit, black bulbul, Nilgiri Pipit among other birds**



Porthimund to Pandiyar

- The route starts from upper plateau and runs down to **Gudalur Forest division through Mukurti peak.**
- **Shola patches, grasslands and wattles** are present in upper plateau and while going down tall grass , **coffee, cardamom, Tea plantation and lantana** are seen in the region.
- Wildlife in this area include **Nilgiri Tahr, Elephant, Tiger, leopard and sloth bear, Malabar Giant Squirrel, Sambar, Nilgiri Langur, Lion tailed macaque** and great pied hornbill can be seen in **O valley slopes.**

ENDEMIC FROGS



Fejervarya neilcoxi
Burrowing frog



Fejervarya manoharani
Burrowing frog



Fejervarya cepfi
Burrowing frog



Nasikabatrachus sahyadrensis
Purple or Indian purple frog, pignose frog



ENDEMIC BIRDS



Black and orange flycatcher



Blue Winged Parakeet



Broad tailed grass bird



Crimson backed sunbird



White bellied flycatcher



Malabar Grey Hornbill



Rufous Babbler



Wyaad laughing thrush



ENDEMIC MAMMALS and FISH



Nilgiri Tahr



Lion-tailed Macaque



Nilgiri Langur



Malabar spotted Civet



Brown Palm Civet



Nilgiri Marten



Denison barb-Miss Kerala



Rainbow Trout



PLANTS



Kurinji Flower



Lantana



Myristica swamp



Myristica malabarica

Thank you all!