

STATE TO TRAIN FOUR SPORTSPERSONS FOR 2016 OLYMPICS: THIRUVANCHOOR RADHAKRISHNAN | P5

MALABAR CEMENTS CHERTHALA UNIT TO BE REOPENED, SHIP WITH CLINKER ARRIVES | P4



# There is a man-eater on the prowl...

## Students Stay Away From Schools, Farming Hit, People Keep Indoors

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**Kozhikode:** It is one thing to be dead and another thing to be meat said naturalist David Quammen in his book 'Monster of God' that examines mankind's deep evolutionary fear of predators. The Wayanad incidents - where a tiger killed and ate a farmer and later killed a woman within a week - have unlocked the primal fear of residents in the entire forest-fringe villages along Kerala-Tamil Nadu border. The gory image of the split up torso of Bhaskaran at Mukkuthikunnu is still fresh in their mind and it has altered their daily life and livelihood. The grisly images went viral on WhatsApp.

Archana B (13), a Class VII student of St Antony AUPS, Pazhur was so traumatized that she has been bedridden for five days. "She has high fever and screams in her sleep," said her father M V Balakrishnan. President of the Wayanad Prakruthi Samrakshana Samithi N Badusha said that the situation in enclosure villages would go out of hand if the government fails to expedite the voluntary relocation project.

"Tigers becoming man-eaters is a rare and exceptional situation. The very thought of being eaten by a big cat stokes unparalleled fear. The entire notion of man at the top of the food chain is shattered and it can be very frightening," he said.

At Chettiyalathur village, located just 1.5 km away from the spot of the first kill, repeated mike announcements by the local panchayat warn people against walking alone or venture outdoors after dark, adding to the eerie feeling of lurking danger. The 265 people living in the village are literally trapped as both kills took place in the forest corridors connecting the village to the outside world. People dread stepping outside.

"We have lived with elephants, bisons, bears and wild boars all through our lives. But a man-eater

on the prowl changes everything. Our lives have come to a complete halt. Farming activities have been suspended and cattle are not let out. Students have stopped going to school. We have even stopped depending on the nearby rivulet for bathing," said Sreedharan T V, who is also president of the village eco-development committee.

The village is among the 14 settlements that were identified for relocation in 2009, but slow pace of the project and paucity of funds have left them in the enclosure village.

Just 2.8 km away at Pattavayal in Tamil Nadu, where the tiger killed Mahalakshmi, the situation is edgy. Hundreds of policemen line up the streets of nearby Mukkati and Biderkkadu towns where an angry mob went on a rampage on Sunday torching three jeeps parked in the office of the Muthumalai Tiger Reserve and assaulting police staff. The estimated loss is over Rs 40 lakh. The schools remained closed and section 144 was clamped in the locality to maintain law and order.

Manjula S, who saw the killing of Mahalakshmi, said: "We had taken a break for having food. She stepped out just seconds before me and when I walked out, she was lying on the walkway with the tiger biting deep into the neck and I did not hear even a cry. I screamed aloud and the animal looked at me and dropped the body. It then waited in the nearby bush for 20 minutes before the locals drove it away."

Meanwhile, the hunt for the tiger failed to yield any result on Monday even though villagers and forest staff spotted a tiger near the Benna settlement, around 1.5 km from the spot where a woman was killed on Saturday in Tamil Nadu. It moved into the thick vegetation by the time the special task force reached the spot. Three teams of forest officials and sharpshooters combed a 50 acre stretch but failed to spot the tiger.



**PRIMAL FEAR:** (Clockwise from left) Men armed with sticks accompany residents of Benna settlement near the Kerala-TN border as they come out of their settlement. The tiger was spotted here on Monday and armed personnel of the special task force combed the area without success. Forest guard M Sounder Rajan at Mukkati in TN where an angry mob set fire to three jeeps

## We have to devise our own scientific methods

Arun Zachariah

This is for the first time a tiger has



killed and eaten a human being and we are actually learning the process of handling a man-eater. Since there is no known protocol and we have to

devise our own scientific methods to deal with the problem. The tiger population in Kerala has been increasing, but that is not a worrying factor because the prey-predator population in our forest is very healthy.

Though prey population inside the forest has increased by 400%, the lifting of cattle has not increased probably because there is always a herdsman guarding cattle. But, when wild animals become sick, cattle become easy prey. Unlike the mangroves of Sunderbans bordering West Bengal and Bangladesh, where dozens of people are

killed every year by man-eating tigers, there is enough prey in the forests of Western Ghats.

There is a distinct possibility that the tiger that killed two persons in a week has been ailing for sometimes or is a senile creature, unable to hunt its prey. Tigers rarely leave the forest in any other scenario. I was attacked by a tiger in Wayanad last year while trying to tranquillize it. We later found that this nine-year-old tiger had dislocated its forelimb and there were three major injuries on its body. There were infections from the wounds sustained days ago and it had affected the animal's vital organs, leading to its death.

The only way to mitigate this problem is by scientifically and systematically mapping the path of the tiger using camera traps and then zeroing in on the tiger before it becomes a social menace.

(The author is a wildlife expert and assistant Professor at Kerala Veterinary and Animal Science University. As told to Viju B)

## Tranquilizing & relocation can be an effective method

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**Thiruvananthapuram:** At a time when wildlife experts nurse divergent views on tiger problems and the means to address them, **Rajkumar D**, who is a member of National Tiger Conservation Authority (NTCA), feels darting and relocation holds key. He illustrated how Karnataka has been managing man-animal conflict effectively and capturing tigers that have run away from Nagarhole-Bandipur reserves.

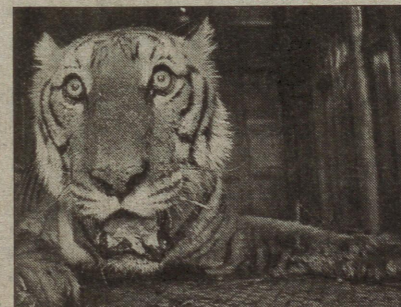
He said that if NTCA charts a scientific mapping of the tiger path, they can catch it within four to five days. Since Wayanad has not been declared as a tiger reserve, the special protection force which has been constituted by National Tiger Conservation

Authority has not yet come into the picture.

Rajkumar D, who was part of the special tiger rescue and relocation team, said a special team comprising doctors need to be first constituted to capture the big cat. "The easy way to track and tranquilize a tiger is by mapping its path and monitoring individual history that is now more or less available through camera traps," he said. Earlier, wildlife expert Dr Ullas Karanth had said that steps should have been taken to eliminate the tiger instead of trying to dart it.

The tiger protection force in Karnataka has so far captured seven tiger since 2009 and relocated five of them to forest areas that are more conducive to the beast. They have also rehabilitated two old tigers at a zoo. The special protection force in Karnataka have come up with innovative techniques like conducting tiger trails in forest - once they have identified a tiger that needs to be tranquilized - atop elephants.

Wildlife Conservation Foundation



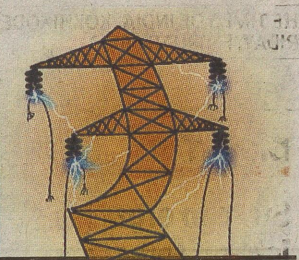
**BIG CAT RESCUE:** The tiger that killed three people in Karnataka was captured by D Rajkumar's team and relocated

"Tigers do not generally attack elephants and we get a vantage point to tranquilize it. This way, the risk of getting attacked by the tiger is minimized," he said, adding that ti-

gers that have been attacking people in the fringe areas of the forest areas see people as their competitors who take away their prey.

"A majority of the tigers that hunt outside the forest are sick or ailing. The tiger that we captured from Chickbargi, in Bandipur tiger reserve, had a porcupine quill that had pierced the right jaw. It also had worn out canines. The wild cat was around nearly 10 years old. It started killing cattle inside the forest and alter moved into human landscape," Rajkumar said.

He also pointed out that they should allow a special team to work without any interference from residents. "Emotions run high when a tiger is on the prowl and residents always want to shoot it down before trying any other method. But, this will not solve the problem. The state need to identify the problem much before a tiger begins to enter human settlements and relocate such old tigers," he said.



**COCAINE BUST: TWO ACCUSED TO BE TAKEN TO GOA TO PROBE THE DRUG SOURCE | P5**

**CENTRE GIVES NOD FOR EXTENSION OF CHHATTISGARH-POGALUR POWERLINE | P6**

# Tigers roar again after a seven-year gap

**Big Cat Population In Kerala Has Increased By 195%**

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If the Jungle Book is to be retold, Rudyard Kipling would have plotted the timeless tale of Mowgli and Sher Khan somewhere near Kerala-Karnataka forests and the Wayanad-Nagarhole-Mudumalai forests, home to the world's single-largest tiger population. With an estimated 570 tigers thriving in this forest habitat, it would have fired the writer's imagination had he perused the new tiger population survey by National Tiger Conservation Authority.

The report comes at a time when the global population of tigers has drastically come down to around 4,000 from 1 lakh at the beginning of the 20th century due to fragmentation of forest habitats and poaching. Conservation experts point out that the population of tigers has a direct bearing on the health of the forests and is a good indicator of the abundant flora and fauna.

But, Western Ghats has a different story to tell. Over the past seven years, the tiger population here has increased by 93%, way ahead of the national average of 57%. The Western Ghats landscape is now home to around 34% of the tiger population in the country. This was one sterling highlight of NTCA survey.

While in central India and eastern forests of Madhya Pradesh, Rajasthan and Maharashtra, the increase was only 14% from 601 tigers to 688 tigers; the Shivalik-Gangetic plains recorded an increase of 63% from 297 tigers to 485 tigers. "While Wayanad sanctuary tops the state list with an estimated 78 tigers, Periyar and Parambikulam reserves followed with an estimated 35 and 20 tigers respectively," a senior forest official said.

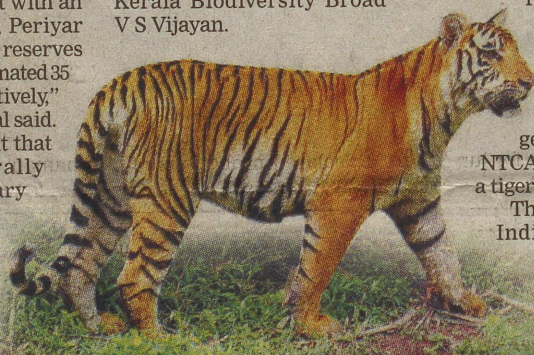
Experts point out that tigers are generally known to be solitary creatures and are very territorial in nature and like to control a large forest area of over 60 sq km.

The success of a healthy tiger habitat in Western Ghats is mainly due to the great conservation effort by the state forest department, especially in Kerala, which saw a 195% increase in tiger population over the past seven years.

"The Karnataka forests always had a rich tiger habitat for many years. But the forest conservation movement in Kerala is laudable as the number of tigers increased from 46 to 136 in just seven years," a senior forest official said. Wildlife experts said that this has helped the big cat family to catch prey and raise cubs without moving out of the state's borders. Principal chief conservator of forests Dr BS Corrie said credit goes to the tireless effort of the field staff of the forest department and various stakeholders like tribal communities who work as guides and watchmen in tiger reserves and sanctuaries.

The forests of Kerala are not only endowed with rich biodiversity, but the green territory is home to a huge herbivore population. The forest data revealed that the spotted deer population increased from 6,259 to 11,398 from 1993 to 2011; similarly gaurs and sambars (deer) population increased from 4,840 to 17,860 and 10,665 to 32,148 respectively.

"Unlike the pug mark spotting method, the tiger census was done using camera trapping that has minimised the scope for error to a larger extent. The increase in their numbers reiterates a strong case for conserving our forests while our forests are becoming more fragmented," said former chairman of Kerala Biodiversity Broad V S Vijayan.



More than half the state's 136 tigers are in Wayanad forests. A scene from Wayanad Wildlife Sanctuary

STATE	TIGER POPULATION		
	2006	2010	2014
Uttarakhand	178	227	340
Uttar Pradesh	109	118	117
Bihar	10	8	28
Andhra Pradesh	95	72	68
Chhattisgarh	26	26	46
Madhya Pradesh	300	257	308
Maharashtra	103	169	190
Odisha	45	32	28
Rajasthan	32	36	45
Karnataka	290	300	406
Tamil Nadu	76	163	229
Assam	70	143	167

**Migratory birds help nourish soil**

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**Thiruvananthapuram:** Last month, when forest officials spotted a lone Amur falcon in the middle of Parambikulam-sanctuary their joy knew no bounds. They watched the bird respectfully from a distance, which was greedily feeding on insects on the marshy lands of the sanctuary. Amur falcon had made a rare soft landing after traversing over 5,000 kilometres from Mongolia, escaping the harsh winter, before settling in the forests of Kerala.

In a few days, he would continue the journey covering over 14,500 kilometres from Mongolia to South Africa and then return as part of the obligatory transnational migration. The falcon is one of the numerous varieties of migratory bird species that visit Kerala every year. It is estimated that of the estimated 2 lakh bird population in the state, around 70,000 are migratory birds who play a key role in regenerating and nourishing the soil of Kerala.

"Past studies have shown that how bird dropping increase the mineral content of soil and contribute to organic manure in addition to clearing weeds and small pests in paddy fields," said Dr P O Nameer who heads Centre for Wildlife Studies at Kerala Agricultural University's college of forestry.

He said wild ducks, waders and terns are some of the most common migratory birds that visit bird sanctuaries and wetlands here. They arrive by September and usually make an exit by April every year. A bird survey conducted last year identified 280 bird species that account for 60% of the bird population outside forest areas. The survey also identified many migratory species in the wetlands of Thrissur, Alappuzha, Kanpur and Kozhikode.

"We need to conduct more studies on the flight pattern, breeding habitats of migratory birds that provide deeper insights into the climatic conditions," he said.

## Despite success, Wayanad cats are left out

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**Kozhikode:** The emergence of Wayanad forests as the tiger capital of the state, with one of the highest tiger densities ever recorded in Kerala, conceals an untold fact. If the annual funding by National Tiger Conservation Authority (NTCA) – the statutory apex tiger conservation body in India – is an indicator, then the big cats of Wayanad Wildlife Sanctuary (WWS) are poorer cousins of their striped counterparts in Periyar Tiger Reserve or Parambikulam Tiger Reserve without the authority's funding.

While the two tiger reserves in the state together received Rs 9.88 crore from NTCA from 2012-2014, WWS – which has a higher tiger populace (76 tigers) – is not part of NTCA's funding as it is not a tiger reserve.

The status of tigers in India (2014) report – which reveals that more than half the state's 136 tigers are in

## K'TAKA OFFICERS READY TO TACKLE FOREST FIRES

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**Mysuru:** It is that time of the year when forest officers in tiger sanctuaries of south Karnataka face a tough challenge of preventing forest fires. On Wednesday, a small portion of Bandipur's buffer range witnessed the season's first forest fire. Though the accident happened at the edge of the tiger sanctuary, officials are not taking a chance this summer.

Three years ago, the adjoining Nagarhole national park, which is spread across Mysuru and Kodagu districts and forms part of Nilgiri Biosphere Reserve, witnessed a devastating fire that destroyed nearly 600 hectares of forests. Nesting birds, vegetation and reptiles were charred to death.

"Basically all such incidents are acts of

sabotage claimed chief conservator of forests R Gokul, who is also the director of Nagarhole national park. "Nagarhole is spread across 700 sq km and it is herculean task for officers to tackle fire incidents during summer. Grass will be dry and even a small fire can create havoc," he said, adding that 300 tribesmen have been hired as watchers to check forest fires.

"We have created 1795 km of fire line (a gap in vegetation to control fire) to control fires, watch towers will be established at vital locations to alert ground staff, new vehicles have been included to reach ground zero during emergency," he said.

Bandipura National Park director H C Kanatharaju said: "We have made elaborate arrangement to prevent fires in tiger reserves. Wednesday's fire at the buffer range was put out immediately."

Wayanad forests – highlights the immediate need for enhanced conservation and funding for the 344 sq km sanctuary that could be the only prime tiger habitat outside the designated tiger reserves in the country. While the 47 tiger reserves in the country are flush with conservation funds and long-term tiger conservation plans, WWS is battling a host of challenges ranging from

fragmentation of landscape and increasing man-animal conflict to threat of forest fires and overall negative public perception towards tiger conservation cause.

"The fact that WWS has become the most tiger-rich landscape in the state, underscores the need to have a proper long-term action plan to secure inviolate space for tigers in this critical habitat.

What is even more important is immediate government intervention to create awareness among people to dispel the misconceptions that declaring WWS as a tiger reserve would result in imposing stricter controls over their lives. WWS could lose crores of rupees that could aid conservation, relocation of forest settlements and mitigation of human-wildlife conflict due to stiff public re-

sistance against the declaration of the sanctuary as tiger reserve," said president of the Wayanad Prakruthi Samrakshana Samiti N Badusha.

Warden of WWS Roy P Thomas said that it is the natural eco-system of Wayanad forests that has made it one of the most promising tiger source sites.

"The percentage of biomass in Wayanad is very high compared to neighbouring tiger reserves of Nagarhole, Bandipur or Mudumalai resulting in significant prey densities that can sustain such a healthy tiger population. Also as the sanctuary is located in the windward side of the Western Ghats, we have an abundance of rainfall of 3,000 mm each year compared to 800 mm in Bandipur reserve that results in six month-long seasonal migration of wild animals from nearby protected areas," he said.

Forest officials said that the WWS got just a meagre Rs 40 lakh in central funds while the state funds was limited to just Rs 1.02 crore this fiscal that is grossly inadequate for the management of the sanctuary.

NATIONAL HIGHWAY WIDENING ONLY UP TO 30M, GOVT TELLS HIGH COURT | P4

TODDLER ABDUCTED SIX MONTHS AGO RESCUED FROM BEGGAR WOMAN | P5



# Forest cover increases, but greens sceptical

Latest FSI Report Says Kerala Is Amongst The Few States That Managed To Increase Forest Cover, But Environmentalists Say It Could Be Plantations

Viju B | TNN

First the good news. Kerala is one of the few states in the country which has managed to increase its forest cover substantially in the last two years as per the latest India State of Forest Report (ISFR) released last week.

The report compiled by the Forest Survey of India (FSI) used remote sensing satellite technology using a maximum mapping unit up to one hectare specification. Out of the total geographical area of 38,863 square kilometers in the state, the reserve forest area is 11,265 square kilometer, which is around 29% of the total area. But the state total forest cover, which includes tree canopy outside the forest, open forest, scarred groves, plantation and orchards, came to around a high 52%.

The ISFR report said that the state had 17,300 sq km of forest cover in 2011, which increased to 17,922 sq km in

two years, an increase of 622 sq kms.

The survey said that nine hill districts in the state added 311 sq km of tree cover. The FSI's definition of 'forest cover' is, areas having tree canopy of more than 10% in a one hectare area irrespective of owner-

ship, be it orchards, bamboo or palms. This has come in for criticism from ecologists. Interestingly, the hill districts have more open and medium forest cover than very dense forest cover, indicating the presence of large rubber plantations and orchards.

Senior forest officials said that the increase in forest cover is due to consistent afforestation programmes, a fact that has been highlighted by FSI which also said inclusion of tribal forest lands and successful rehabilitation of tribals from core forest areas as reasons for increase in forest area.

But greens said that a detailed study needs to be done on the claims as this could be due to the increase in rubber cultivation and teak plantation. The state plan-

ning board data too showed the area in rubber cultivation in the last two years alone increased by 5,435 hectares.

"While the increase in tree canopy is good news, this claim should be taken with a pinch of salt. The Kerala Forest Development Corporation, The Plantation Corporation Of India, and other PSUs own thousands of acres of leased land and majority of the land is cultivated for wood sold in the open market. This cannot be called afforestation," said Harish Vasudevan, Secretary of One Earth One Life said.

He said that planting teak and eucalyptus trees inside the forest might increase the tree cover but it would do no good to wild animals, who were being forced to come outside the forests in search of food.

Meanwhile, former chairman of Kerala Bio diversity Board Dr V S Vijayan said that just by planting some trees and to increase the so called forest cover might not serve any purpose. "We need to plant indigenous trees and fruits bearing plants that will create a rich ecosystem and help preserve the biodiversity of the state," he said.



CANOPY SPREADS: The ISFR report said the forest cover in the state has increased by 622 sq km in two years

## They gave up their ancestral lands for forests to flourish

K R Rajeev | TNN

**Kozhikode:** Though the state can take pride in bringing significant swathes of land under forest cover, the most touching personal contribution in the feat could have been by the around 800 families in Wayanad who had agreed to give their land holdings totalling around 1,500 acres for the forests under the Wayanad Wildlife Sanctuary (WWS).

Come August and as many as 75 families at the Kurichyat settlement, including 40 tribals, located inside the forest will silently part with their lands to make way for the forests to expand and take root in their 120 acres of land. Kurichyat will become the fourth village to completely move out of the forests under the Integrated Development of Wildlife Habitat Scheme (IDWHS) project being implemented in in Wayanad since 2012.

One of the villagers, Kurichyat Raghavan, will bid adieu to his 12 acres of farm land surrounded by forests next month, fully knowing that the Rs 30 lakh he would receive as compensation would not suffice to purchase even one acre of land for him elsewhere.

"Our families have been living on this land for generations. But, we have now realized that our presence will put further pressure on the forests and lead to increase

The poor families have set a model in the forest conservation history of the state. The sacrifice they have made is priceless as it comes at a time when elsewhere in the state prime forests are increasingly targeted by land mafias and greedy vested interests

N Badusha | PRESIDENT, WAYANAD PRAKRITHI SAMITHI

in human-animal conflicts. So, we have decided to move out with the hope that it would benefit both the forests as well as our families in the long run," Raghavan said.

Though many of the families nursed hopes of doing one last round of sowing in their fields this monsoon, they dropped their plans after forest officials said that they would have to move out before the crops could be harvested.

Wayanad Prakrithi Samithi president N Badusha said that nowhere else in the country would have around 2,500 families volun-

tarily offered to give up their land to the forest for upholding a green cause.

"The poor families have set a model in the forest conservation history of the state. The sacrifice they have made is priceless as it comes at a time when elsewhere in the state prime forests are increasingly targeted by land mafias and greedy vested interests," Badusha said.

He said that many of the families settled here after they were given leased land by the British during the World War I days under the 'grow more food' programme. A study conducted by Kerala Forest Research Institute (KFRI), Peechi in 2008, identified 12,000 people from 2,500 families in 110 settlements inside the sanctuary, who needed relocation. The study recommended a compensation of Rs 10 lakh to each eligible family, irrespective of their land holding.

Around 119 families from three villages have already moved out of the sanctuary since 2012, helping the state add over 200 acres to its forests and the remaining 10 more villages are waiting to move out of the forests.

Roy P Thomas, wildlife warden, WWS, said that the voluntary relocation programme had significantly helped to improve the forest management apart from enhancing the quality of wildlife habitat inside the sanctuary.

### TOP STATES THAT INCREASED THE FOREST COVER (in sq km)

State	GA	Forest Cover in 2011	Forest Cover in 2013	Increase
Kerala	38,863	17,300	17,922	622
Bihar	94,163	6,845	7,291	446
Gujarat	1,96,022	14,619	14,653	34
Jharkhand	79,714	22,977	23,473	496
Odisha	15,5707	48,903	50,347	1,444
W Bengal	88,752	12,995	16,805	3,810

### STATES WITH MAXIMUM INCREASE IN FOREST COVER

West Bengal	3,810 SQ KM
Odisha	1,444 SQ KM
Kerala	6,22 SQ KM

### THE TOTAL FOREST AND TREE COVER OF THE COUNTRY

is 8792 million hectare, which turns up to be 24.01% of the geographical area of India. When compared to the 2011 assessment, the forest cover of the country has increased by 5,871 square kilometer

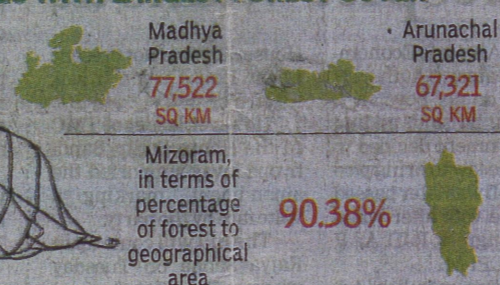
Illustration: Gireesh



### FOREST COVER IN INDIA

	(in sq km)	% of GA
Very dense forest	83502	2.5
Moderately dense forest	3,18,745	9.70
Open forest	2,95,651	8.99
Total	6,97,898	21.23

### STATES WITH LARGEST FOREST COVER



The figures include 295 sq km of reserve forest and 1,838 sq km of deemed

reserve forest (vested forest and ecologically fragile land)