

005 *Karaiyarar Dam,  
Kalakad Mundanthurai Tiger  
Reserve, Tamil Nadu.*

There are numerous hydroelectric dams up and down the Western Ghats. They provide electricity and irrigation water to the nearby plains. Their construction has often been controversial, since it has opened up relatively virgin forest areas to human disturbance.







# streets and skylines

Biodiversity Hotspot 005 - 012

Old Town 013 - 017

Mongol Mirage 018 - 027

Walls 028 - 036

Elbow Grease 037 - 041

# Biodiversity Hotspot

## *Ecology and Landscape in India's Western Ghats*

Text & Photos (005 - 014)

Ian Lockwood

### Locations

Maharashtra, Kerala,  
Tamil Nadu, India

### Equipment

Mamiya 6, Yashicamat,  
Noblex 120 and Hasselblad  
503 series with Kodak T-Max  
100 and Konica Infrared  
B&W film

The rugged mountains and rolling hills of the Western Ghats separate India's wet Malabar Coast from the arid interiors of the peninsula. By directing the southwest monsoon and feeding water to peninsular India's thirsty plains, they force heavy, eastward-moving clouds to deposit most of their rain on the windward side. Western slopes may have 6000 cm of annual rainfall while a short distance beyond the crestline, there are near desert-like conditions in the eastern rain shadow. Their densely forested slopes play a critical role in water catchment and supply all of the major rivers of the Indian peninsula.

Geologically they have common ancestry with other Gondwanaland landmasses in Antarctica, Madagascar and southern Africa. Now the Western Ghats form an uplifted spinal cord whose unique biodiversity shares a fascinating affinity with the island of Sri Lanka as well as the distant Himalaya. ►



006

006 *Ayyappa Pilgrim Portrait, Periyar Tiger Reserve, Kerala.* Devotees of Lord Ayyappa make the long trek through the rainforest to the Sabarimala temple, which attracts pilgrims from all over southern India and much further afield. It sits in the heart of Periyar's fine evergreen rainforest in the southern Western Ghats.

007 *Bathing at Lower falls, Courtallam, Tamil Nadu.* In June when the southwest monsoon rolls up the western coast, bathers and pilgrims flock to the south Indian "spa" of Courtallam. The streams originate in the thickly forested hills that lie south of the Shencottah gap. Falls like these symbolise the close relationship between natural forests and the life-giving water of these streams: When they are degraded or destroyed they give less.





008 *Clearing Hillside Near Ku-kaal Shola.* Farmers burn off crop residues in preparation for planting near Ku-kaal *shola* in the Palni Hills of Tamil Nadu. This reserve forest is one of the finest *sholas* in a hill range now dominated by exotic eucalyptus, wattle and pine trees. There is increasing pressure on its borders as farmers and developers expand their activities.

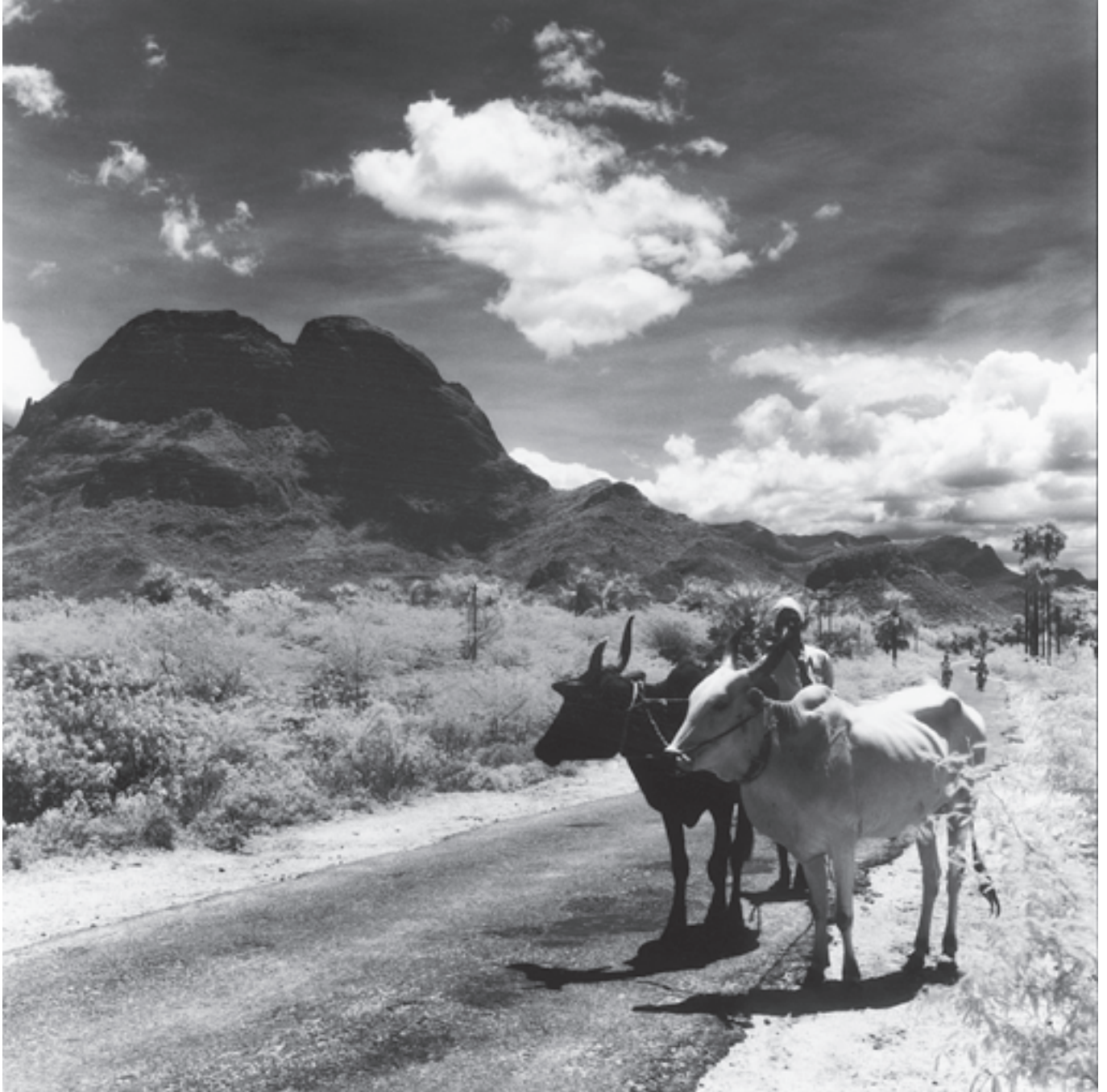
008





009 *Tiruvannamalai Peak, Kalakad Mundanthurai Tiger Reserve, Tamil Nadu. Spent monsoon clouds moving eastwards over the rugged terrain on the eastern slopes of the Western Ghats. This area is protected as a part of the large Kalakad Mundanthurai Tiger Reserve.*

009



010



► Human population density in the peninsula is high yet up until recently the Western Ghats have been veritable islands of diversity, free from the destructive habits that have ravaged the more accessible surrounding plains. That situation has been rapidly changing as the region comes under stress from increased mining and logging, the expansion of hill-stations and the introduction of non-native plant species.

Biologically rich, the Western Ghats are blessed with high rates of endemism. As a global alarm is sounding on declining biodiversity, the Western Ghats and Sri Lanka have together been designated one of 25 global 'Biodiversity Hotspots'. This designation, made by Conservation International, considers the two areas as one critical unit under threat from anthropocentric forces. ■



011





‘Biologically rich, the Western Ghats are blessed with high rates of endemism. As a global alarm is sounding on declining biodiversity, the Western Ghats and Sri Lanka have together been designated one of 25 global Biodiversity Hotspots.’

010 *Cumbum Valley Pan, Palni Hills, Tamil Nadu.* A panoramic view looking over the Cumbum Valley from the lofty heights of the western Palni Hills. The valley is irrigated with water from Periyar Lake in Kerala.

011 *Trees in Flower Below the Western Face of Agasthyamalai, Neyyar Wildlife Sanctuary, Kerala.* The view looks up at Agasthyamalai from the moist deciduous forests of Neyyar Wildlife Sanctuary. This sacred peaks hosts the highest levels of biodiversity in the entire Western Ghats.

012 *Devil's Kitchen Shola, Palni Hills.* Shola forests are montane (above 1800 metres) evergreen tropical forests that are unique to the high altitude regions of the Western Ghats. The prominent tree here is *Photinia integrefolia* ssp. *Sublanceolata*, a sturdy tree found in sholas.

Read Ian Lockwood's full story on this strikingly unique region in an upcoming issue of Asian GEOgraphic.