

SOME FACTS ABOUT THE HIMALAYAS

- The Himalayas are less than 25 million year old, amongst the youngest mountains in the world!
- Himalayas stretch 1900 Miles (3000Kms) long and between 50-200 miles wide
 - The Himalayas are divided into three zones depending on their altitudes
 - Outer or lower Himalayas: Not more than 3000Feet above MSL these are known as the Siwaliks
 - Middle or greater Himalayas: Extend from Kashmir to Bhutan and China between 600 feet to 14000Feet high
 - Inner Himalayas: Consist of Zanskar, Ladakh, Hindu Kush and Karakoram
 - The Himalayas excluding the Karakoram are divided into five ranges depending on their location: Kashmir Himalayas, Punjab Himalayas, Kumaon & Garhwal Himalayas, Nepal Himalayas, Assam Himalayas
- The Indian Himalayas consists of Arunachal Pradesh (Also known as the Assam Himalayas), Sikkim, Kumaun, Garhwal, Kinnaur, Spiti, Kullu, Lahaul, Kishtwar, Kashmir, Zanskar, Ladakh and the Eastern Karakoram.
- The Eastern Himalayas are considerably wetter than the Western because the rain clouds coming from Bay of Bengal drain themselves in the southern section losing moisture quickly as they move northwest.
- In general the temperature drops about 1 degree C for every 300Mtrs rise in altitude.
- Even in winters, one may see grasshoppers and agamid lizards feeding or basking in the sun on one side of the slope, while a few meters away the ground is covered by deep snow and all animals are hibernating.

MEGHALAYA

Location	Latitude 20° 1' N & 26° 5' N, Longitude 85° 49' E & 92° 53' E
Area	22,429ff Sq. Km.
Capital	Shillong
Districts	Seven- E.Khasi Hills, W.Khai Hills, E.Garo Hills, W.Garo Hills, S.Garo Hills, Jaintia & Ri Bhoi
Principal Languages	Khasi , Pnar , Garo & English
Important Towns	Sohra, Tura, Jowai, Nongstoin, Williamnagar, Nongpoh & Baghmara
Racial Origin of the People	Austro Monkhmer, Tibeto-Burman
Maximum Temp	25° minimum 1° or 2 °,
Average Rainfall	1200 cm per annum
Highest Point	Shillong Peak (1965 m)
Best time to visit	March - July

A land of abundant rainfall and thunderous waterfalls, Meghalaya stands true to its Sanskrit meaning 'The Abode of Clouds'. Beautiful cloud formations against the backdrop of the rich blue sky lend a special charm to the place. The beauty of the land is accentuated by its friendly and warm tribes, namely the Khasi, Jaintia and Garo. What sets the tribes of Meghalaya apart, is the practice of a matrilineal society where descent is traced through the mother.

The capital city of Shillong is surrounded by undulating pine-covered hills, adorned by numerous waterfalls. Due to its latitude and high elevation (4600 feet), Shillong has a sub-tropical climate with mild summers and chilly to cold winters. The climate and natural setting lend the city a very special charm, popularly referred to as the Scotland of the East.

The Khasi, Jaintia and Garo tribes each had their own small kingdoms until the 19th century when the British annexed them. The Garos, originally from Tibet, were animists. The Khasis are believed to be Austro-Asiatic. Jaintias are Mongolian and similar to the Shans of Burma. They believed in the universal presence of God and so built no temples. The dead were commemorated by erecting monoliths and some of these can be seen in Khasi villages in central Meghalaya between Shillong and Cherrapunji. In the 19th century many Jaintias were converted to Christianity by missionaries, although they continued many of their old traditions.

Meghalaya is divided into three distinct areas, the Garo, Khasi, Jaintia Hills, each with its own language, culture and particular customs. All three tribes are matrilineal, passing down wealth and property through the female line, with the youngest taking the responsibility of caring for the parents. Children are educated in English from a small age and speak fluently.

The southern slopes of Meghalaya have abundant deposits of limestone. This coupled with a high level of precipitation, humid climate, and elevation make ideal conditions for the formation of caves. With more than 500 caves, Meghalaya boasts of the largest network of caves found on the Indian sub continent. This network of caves amazingly spans over a 1000 kilometers.

Caves have been explored out of necessity, out of curiosity or for mystical reasons for thousands of years. However, only in the latter part of the last century has the activity developed into a serious sport. Caving basically refers to the activity of exploring underground passages and chambers. The availability of modern day equipment makes this activity easier and more enjoyable.

VEGETATION

Meghalaya has a variety of natural vegetation, ranging from tropical mixed forests to a pure stand of pine forests, which reflects the variations in physiography, soils and climatic conditions within the State.

In Meghalaya the natural vegetation has been adversely affected by reckless cutting, grazing, and jhumming (shifting cultivation). In some parts of the State, the vegetation has not only been greatly altered but practically destroyed by man and his animals, still there are pockets of valuable primary forests that exist, particularly in the inaccessible and protected parts of the state.

In Western Meghalaya or in the Garo Hills, the northern and southern low hills, with warm and humid climate, have dense tropical mixed forests where sal (*shorea robusta*) and bamboo are the most important vegetation. The principal bamboo species found here are the dalu and muli. Besides sal and bamboo, other important species found in these forests are the gurga and the haldu. Cane and agaru trees are also found. In the higher parts of the Tura range where the climate is relatively cooler, there occurs a small patch of temperate forest with pine and firs as important species.

The natural vegetation of Central and Eastern Meghalaya can be divided into three types:

- Mixed Tropical forests
- The grasslands
- The temperate forests

The mixed tropical evergreen hardwood forests occur in the northern and southern parts up to an elevation of 900m ASL. In these areas the climate is a little warm throughout the year with an annual rainfall of about 180cm. The main species are Sal, Nahar, Champa & Gomari. Thickets of bamboo, cane and wild banana are present on the hill slopes. There are rolling grassland in the lower parts of the Central uplands between the elevation of 900-1300M. These grasslands are dotted with pine trees.

FLORA

Blessed with different climatic conditions, Meghalaya boasts of a variety of plants, from the Rhododendron forested Shillong peak to the insectivorous pitcher plants found both in the Jaintia Hills and Garo Hills. Different varieties of ferns including the tree fern lend beauty and grace to their surroundings.

The genetic constitutions of different plants or life forms can be classified as below:

- i. Parasites and Epiphytes
- ii. Succulent Plants
- iii. Trees and Shrubs known as Phanerophytes

In Meghalaya, all the above classes of plant life are found to occur naturally, constituting its rich and varied natural vegetation.

About 300 of the world's species are found in its rich forest lands, gardens and nurseries of Meghalaya. Amongst its rare species are the insect eating Pitcher Plant, wild Citrus and Pygmy Lily. The highest numbers of orchid species are located in Mawsmai and Mawmluh. En route to Cherrapunjee, the forests at Sohrarim is a botanist's paradise. Meghalaya is home also to about 300 known varieties of the 17,000 species of orchids found in the world. Also found in Meghalaya, in abundance are a number of medicinal plants that are used in traditional medicine. Fruits such as plums, peaches, pears, oranges, pineapples, bananas, cashew nuts as well as spices like ginger, pepper, turmeric, cinnamon and bay leaf are also grown extensively in Meghalaya.

Meghalaya's endemic Pitcher Plant (*Nepenthes khasiana* Hk) remains till now an explicable phenomenon to the botanists. It occurs in the Jarain area of the Jaintia Hills and the Baghmara area of the Garo Hills.

The forests of Meghalaya are treasure house of valuable products such as timber, fuel-wood, fodder, resin, tannin, gums, shellac, fibre, latex, essential oils, fats, edible fruits, honey and a large number of medicinal plants. Meghalaya is well known for bay leaves and cinnamon. *Morus alba*, *Quercus semiserrata* and a number of other tree species play a vital role in the economy of the State, being the host plants for rearing of silk worms for sericulture.

Meghalayans in general are fond of decorating their courtyards with seasonal flowers and one comes across Dahlia, Canna, Gladiolus, Begonia, Tropaeolum, Aster, Polargonium, Antirrhinum, Crinum, Celosia, Kniphofia, Impatiens, Chrysanthemum, Petunias, Pansy, Calendula, Sweet peas and Salvia. Many climbers like Bougainvillea, Rosa, Jasminum, etc are quite common. Multiplicity of orchids like Phaius, Dendrobium and Cymbidium spp. are also cultivated.

Meghalayan forests offer tremendous scope for sericulture or silk worm rearing industry. The major crop plants of Meghalaya are Paddy, Maize, Millets, Pulses, Potato, Jute and Mesta, Ginger, Turmeric, Black Pepper, Sugar Cane, Oil Seeds. Both arecanut and betelvine are important cash crops of the State. Khasis are used to chew betel nuts and betel leaves since time immemorial. Vegetables are grown extensively in the central plateau of the Khasi Hills with loamy soil and also in the plains of the Garo Hills. Recently Tea and Coffee are being grown in lands abandoned after jhuming.

Among the important and recognised medicinal plants found and cultivated in Meghalaya are Ipecac, Rauwolfia serpentina, Cinchona, Abromine, Chaulmoogra Oil, Croton Oil, Eucalyptus, Castor Oil, Chiretta, Solanum khasianum, Casearia vareca, Zanthoxylum armatum, Hedyotis scandens, Paederia foetida, Salix alba, Anacardium occidentale, Cinnamomum, Taxus baccata.

FAUNA

Meghalaya may be a paradise to botanists for its variedly rich concentration of valuable flora but it is also no less, a happy hunting ground to the zoologists for its interesting, rare and diverse faunal wealth.

It is said that about 50% of the total number of mammal genera found in the entire Indian sub-continent can be seen in Meghalaya and its adjoining states in the North-East. Out of the above, nine genera of mammals, such as Tupaia, Rhizomys, Cannomys, Chiropodomys, Micromys etc occur only in Meghalaya and its adjacent areas.

There are about 2500 elephants in the State out of which, about 200 are found in the Garo hills and the rest of the Jaintia Hills. The wild elephants are concentrated in Ramphanggiri in the East Garo Hills, at a distance of about 10km from Balpakram. The other wild animals found in the State are tigers, bisons, hillocks, gibbons, boars, barking deer, sambhars, bears, leopards, slow loris & apes. The other more interesting animals found are:

- Hoolock - the only tailless ape in India
- Golden Cat
- Leopard Cat
- Jungle Cat
- Large Indian Civet
- Binturong or Bear Cat
- Himalayan Black Bear
- Barking Deer
- Pangolin

Reptiles, fishes, Insects & Butterflies:

Among Reptiles, many kinds of snakes(both poisonous and non poisonous) and lizards are included. Important ones are:

- Indian Cobra
- King cobra
- Coral Snake
- Vipers
- Python
- Blind Snake
- Copperhead
- Red-necked Kulback
- Green Tree Racer

Amphibians like frogs, toads etc. and fishes like rohu, mrigal, kalibaus, puti and many more of hill stream adaptation are found abundantly in Meghalaya. Electro fish are found in the rivers of Garo Hills. Among the insect population, ants, flies, bees, beetles are common.

Meghalaya's butterflies are world famous, among which are Blue Peacock, the Karserhed, the Orange Oak Leaf, the Dipper, the Bhutan Glory. It is for this exquisitely diverse, rare and wonderful animal life that Meghalaya is called a veritable Nature's Wonderland.

Avifauna

In the forests of Meghalaya, especially in lower altitudes, multifarious species of birds can be seen in abundance. Some of the common birds are:

- Hoopoe
- Long tailed Broadbill
- Scarlet Minivet
- Burmese Roller
- Blue-throated Barbet

- Red-vented Bulbul
- Himalayan Black Bulbul
- Himalayan Whistling Thrush
- Spotted Forktail
- Black-breasted Kalij Pheasant
- Red Jungle Fowl
- Mynas like Jungle Mynas, Hill Mynas etc.
- Turtle-dove

Besides, hornbills including the Great Indian hornbill, florican, owl, black drongo and many other birds such as the flycatcher, tree pie, magpie, and woodpecker are also found.

CAVING IN MEGHALAYA

Meghalaya has more than 500 caves identified till date, of which around 147 have been partially or fully explored and mapped. Some of the important ones are located in three Autonomous District Council areas, namely, Khasi Hills Autonomous District Council, Garo Hills Autonomous District Council, and Jaintia Hills Autonomous District Council. Caves have been explored out of necessity, out of curiosity or for mystical reasons for thousands of years. However, only in the latter part of the last century has the activity developed into a serious sport. Caving basically refers to the activity of exploring underground passages and chambers. The availability of modern day equipment makes this activity easier and more enjoyable. Every year, expert cavers from all over the world explore the hills of Meghalaya, to find new caves and map them. Some very large caves with beautiful formations are well mapped and are easily accessible. Caves are located in almost all the districts of the state. Meghalaya probably has more caving potential than any other state in the country

Caves in the Khasi Hills

- i. Krem Mawkhyrdop or Krem Mawmluh
- ii. Krem Dam
- iii. Krem Lymput
- iv. Mawsmal Cave
- v. Krem Mawjymbuin

Caves in the Jaintia Hills

- i. Krem Liat Prah
- ii. Synrang-Pamiang
- iii. Krem Lubon
- iv. Krem Chympe
- v. Kotsati – Umlawan Cave System
- vi. Krem Umkesh
- vii. Krem Shrieh (Tangnub Monkey Cave)
- viii. Krem Mawshun
- ix. Krem Syndai / Krem Jogindra
- x. Krem Umthloo
- xi. Krem lawe

Caves in the Garo Hills

- i. Balwakol
- ii. Dangedikol Chiningkrikol
- iii. Korekol

For more information on caving and to know more about the experience from a first time caver do visit <http://kirtikc.wordpress.com/>