

Our Natural Heritage-

“NATURE IN OUR SURROUNDINGS”

By-

**National Museum of Natural History,
New Delhi**

Nature in Our Surroundings



Some Natural Green Areas in Delhi



Asola Wildlife Sanctuary



Aravalli Biodiversity Park



Some Natural Green Areas in Delhi



Delhi Ridge



Yamuna Biodiversity Park



Queens flower (*Lagerstroemia speciosa*)



Queens flower is a beautiful tropical flowering tree with flowers that are pink, purple or purplish - pink. The fruit is oval, about one inch long and splits in six pieces when mature. The seeds are small and have winged flaps. The reddish brown wood is used for home building, furniture, boots, etc. **Medicinal uses** - roots are used for stomach problems. Tea of the leaves is used against diabetes mellitus and for weight loss. Leaves are able to lower blood sugar, effective in weight loss.

Neem Tree (*Azadirachta indica*)



Azadirachta indica, also known as Neem. It is one of two species in the genus *Azadirachta*, and is native to India, Pakistan, and Bangladesh growing in tropical and semi-tropical regions. Neem tree is the official tree of the Sindh Province. *Azadirachta indica* (Neem), an herb extensively used in Ayurveda, Unani and Homoeopathic systems of medicine to treat many health related problems and ailments, and also known to exert anticancer, antioxidant, wound-healing, and antimicrobial properties is also known to be one of these plants from which almost every part is used. Its fruits and seeds are the source of neem oil.

Jamun Tree (*Syzygium cumini*)



Jamun Tree is a fairly fast growing species, it can reach heights of up to 30 m and can live more than 100 years. Its dense foliage provides shade and is grown just for its ornamental value. At the base of the tree, the bark is rough and dark grey, becoming lighter grey and smoother higher up. The wood is strong and is water resistant. Because of this it is used in railway sleepers and to install motors in wells. It is sometimes used to make cheap furniture and village dwellings though it is relatively hard to work on. The leaves are used as food for livestock, as they have good nutritional value. *Syzygium cumini* trees start flowering from March to April. The flowers are fragrant and small, about 5 mm in diameter. The fruits develop by May or June and resemble large berries. The fruit is oblong, ovoid, starts green and turns pink to shining crimson black as it matures.

Ashok tree (*Polyalthia Longifolia*)



Polyalthia longifolia is a lofty evergreen tree, native to India, commonly planted due to its effectiveness in alleviating noise pollution. It exhibits symmetrical pyramidal growth with willowy weeping pendulous branches and long narrow lanceolate leaves with undulate margins. The tree is known to grow over 30 ft in height. *Polyalthia longifolia* is sometimes incorrectly identified as the Ashoka tree (*Saraca indica*) because of the close resemblance of both trees. One might mistake it as a tree with effectively without branches, but in fact a *Polyalthia* allowed to grow naturally (without trimming the branches out for decorative reasons) grows into a normal large tree with plenty of shade.

Banyan Tree (*Ficus benghalensis*)



Ficus benghalensis, the Indian Banyan, is a large and extensive growing tree of the Indian subcontinent. *Ficus benghalensis* produces propagating roots which grow downwards as aerial roots. Once these roots reach the ground, they grow into woody trunks that can become indistinguishable from the main trunk. The Great Banyan tree is located in Acharya Jagadish Chandra Bose Indian Botanic Garden, Howrah, near Kolkata, India and is over 250 years old and in spread it is the largest known in India, perhaps in Asia. The banyan tree is also considered sacred and is called "Vat Vriksha" in Sanskrit,

Peepal Tree (*Ficus religiosa*)



Ficus religiosa is a large dry season-deciduous or semi-evergreen tree up to 30 metres (98 ft) tall and with a trunk diameter of up to 3 metres (9.8 ft). The leaves are cordate in shape with a distinctive extended tip; they are 10–17 cm long and 8–12 cm broad, with a 6–10 cm petiole. The fruits are small figs 1-1.5 cm in diameter, green ripening to purple. In the Hindu religion, Peepal tree has a lot of reverence and significance for people. People worship the tree and performs puja. Peepal tree is of great medicinal value. *Ficus religiosa* is used in traditional medicine for about 50 types of disorders including asthma, diabetes, diarrhea, epilepsy, gastric problems, inflammatory disorders etc.

Gulmohar (*Delonix regia*)



Delonix regia is a species of flowering plant in the family Fabaceae, subfamily Caesalpinioideae. It is noted for its fern-like leaves and flamboyant display of flowers. In many tropical parts of the world it is grown as an ornamental tree and in English it is given the name Royal Poinciana or Flamboyant. It is also one of several trees known as Flame tree. The delicate, fern-like leaves are composed of small individual leaflets, which fold up at the onset of dusk. Gulmohar gets 30-40 ft tall, but its elegant wide-spreading umbrella-like canopy can be wider than its height. Gulmohar is naturalized in India and is widely cultivated as a street tree.

Amaltas Tree (*Cassia fistula*)



Cassia fistula, known as the golden shower tree and by other names, is a flowering plant in the family Fabaceae. The species is native to the Indian Subcontinent and adjacent regions of Southeast Asia. It ranges from southern Pakistan eastward throughout India to Myanmar and Thailand and south to Sri Lanka. The golden shower tree is a medium-sized tree, growing to 10–20 metres (33–66 ft) tall with fast growth.

Devil's tree (*Alstonia scholaris*)



Devil's trees can grow very large, The leathery, sessile, simple leaves are elliptical, ovate, linear or lanceolate and wedge-shaped at the base. The leaf blade is dorsiventral, medium-sized to large and disposed oppositely or in a whorl and with entire margin. The leaf venation is pinnate, with numerous veins ending in a marginal vein. The small, more or less fragrant flowers are white, yellow, pink or green and funnel-shaped, growing on a pedicel and subtended by bracts. They consist of 5 petals and 5 sepals, arranged in four whorls. The fertile flowers are hermaphrodite. The gamosepalous green sepals consist of ovate lobes, and are distributed in one whorl. The annular disk is hypogynous. The five gamosepalous petals have oblong or ovate lobes and are disposed in one whorl.

Palash (*Butea Monosperma*)



Palash is a medium sized dry season-deciduous tree, growing to 15 m tall. It is a slow growing tree; young trees have a growth rate of a few feet per year. The leaves are pinnate, with an 8–16 cm petiole and three leaflets, each leaflet 10–20 cm long. The flowers are 2.5 cm long, bright orange-red, and produced in racemes up to 15 cm long. The fruit is a pod 15–20 cm long and 4–5 cm broad. It is used for timber, resin, fodder, medicine, and dye. The wood is dirty white and soft and, being durable under water, is used for well-curbs and water scoops. Good charcoal can be made from it. The leaves are usually very leathery and not eaten by cattle.

Silk cotton tree (*Bombax insignne*)



Bombax species are among the largest trees in their regions, reaching 30 to 40 metres in height and up to 3 metres trunk diameter. The leaves are compound with entire margins and deciduous, being shed in the dry-season. They measure 30 to 50 cm across and are palmate in shape with 5 to 9 leaflets. The calyx is deciduous, meaning it does not persist on the fruits. They bear 5 to 10 cm long red flowers between January and March while the tree is still leafless. The stamens are present in bundles in two whorls, while the staminal column lacks lobes. The ovary matures into a husk containing seeds covered by a fibre similar to that of the kapok (*Ceiba pentandra*) and to cotton, though with shorter fibres than cotton that does not lend itself to spinning, making it unusable as a textile product.

Indian honeybees (*Apis cerana indica*)



Apis cerana is a subspecies of honeybees, there are two subspecies of *A. Cerana* which are *Apis cerana cerana* and *Apis cerana indica*, these species are similar to *Apis mellifera*, and *A. mellifera* tends to be slightly larger than *A. cerana* and can be readily distinguish them. *A. cerana* is one of the predominant species found and domesticated in India, Pakistan, Nepal, Burma, Bangladesh, Srilanka, Thailand and mainland Asia. These are less aggressive than any wild bees and also less swarming behavior and can be easily used for beekeeping. They are also called Eastern honeybees/Indian honeybees. They usually build multiple combs nest in some tree hallows and some man made structures.

Common Butterflies



Common Mormon (*Papilio polytes*)



Monarch (*Danaus plexippus*)

Weidemeyer's Admiral
(*Basilarchia weidemeyerii*)



A **butterfly** is a mainly day-flying insect of the order Lepidoptera, which includes the butterflies and moths. Butterflies have large, often brightly coloured wings, and conspicuous, fluttering flight. The butterfly's life cycle consists of four parts: egg, larva, pupa and adult. Some, like the Monarch, will migrate over long distances. Some butterflies have evolved symbiotic and parasitic relationships with social insects such as ants. Some species are pests because in their larval stages they can damage domestic crops or trees; however, some species are agents of pollination of some plants, and caterpillars of a few butterflies (e.g., Harvesters) eat harmful insects. Culturally, butterflies are a popular motif in the visual and literary arts.

Black Drongo (*Dicrurus macrocercus*)



The **Black Drongo** (*Dicrurus macrocercus*) is a small Asian passerine bird of the drongo family Dicruridae. It is a common resident breeder in much of tropical southern Asia from southwest Iran through India and Sri Lanka east to southern China and Indonesia. It is a wholly black bird with a distinctive forked tail and measures 28 cm (11 in) in length. Feeding on insects, it is common in open agricultural areas and light forest throughout its range, perching conspicuously on a bare perch or along power or telephone lines. The species is known for its aggressive behaviour towards much larger birds, such as crows, never hesitating to dive-bomb any birds of prey that invades its territory. This behaviour earns it the informal name of King Crow. Smaller birds often nest in the well-guarded vicinity of a nesting Black Drongo. Previously considered a subspecies (*Dicrurus adsimilis macrocercus*) of the African Fork-tailed Drongo (*Dicrurus adsimilis*), it is now recognized as a full species.

Red-vented Bulbul (*Pycnonotus cafer*)



The **Red-vented Bulbul** is easily identified by its short crest giving the head a squarish appearance. The body is dark brown with a scaly pattern while the head is darker or black. The rump is white while the vent is red. The black tail is tipped in white. The Himalayan races have a more prominent crest and are more streaked on the underside. Red-vented bulbuls feed on fruits, petals of flowers, nectar, and insects. They breed from June to September. The eggs are pale-pinkish with spots of darker red more dense at the broad end. Nests are small flat cups made of small twigs but sometimes making use of metal wires. Red-vented bulbuls build their nests in bushes at a height of around 2–3 m (7–10 ft; two or three eggs is a typical clutch.

Rose ringed Parakeet (*Psittacula krameri*)



The **Rose-Ringed Parakeet** or Indian Ringneck is classified as a smaller parrot known as a parakeet. These birds have a hooked beak, a long tail, and are smaller in size compared to most parrots. These parrots are about 16 inches in length and they have a stealthy appearance that sets them apart from most exotic birds. Both males and females look very similar; however, the male has a black ring around his neck. His ring is highlighted with turquoise, pink, and blue. Both sexes have large tails that are comprised of 12 feathers. The two largest tail feathers, which are blue, make up a large part of the parrot's size. These elaborate tails can extend as much as 7 inches outward for the male and 6 inches outward for the female. Like most parrots, Indian Ringnecks are intelligent and DO make great pets. They learn concepts quickly and love to show off. Along with being intelligent they are great at talking.

Blue Rock Pigeon (*Columba livia*)



Pigeons and doves constitute the bird clade **Columbidae**, that includes some 310 species. They are stout-bodied birds with short necks, and have short, slender bills with fleshy ceres. Doves feed on seeds, fruits, and plants. This family occurs worldwide. Doves and pigeons build relatively flimsy nests from sticks and other debris, which may be placed in trees, on ledges, or on the ground, depending on species. They lay one or two eggs, and both parents care for the young, which leave the nest after seven to 28 days. Unlike most birds, both sexes of doves and pigeons produce "crop milk" to feed to their young, secreted by a sloughing of fluid-filled cells from the lining of the crop. Young doves and pigeons are called "squabs".

Red-wattled Lapwing (*Vanellus indicus*)



Red-wattled Lapwings are large Plovers, about 35 cm long. The wings and back are light brown with a purple sheen, but head and chest and front part of neck are black. Prominently white patch runs between these two colours, from belly and tail, flanking the neck to the sides of crown. Short tail is tipped black. A red fleshy wattle in front of each eye, black-tipped red bill, and the long legs are yellow. In flight, prominent white wing bars formed by the white on the secondary coverts. It has characteristic loud alarm calls which are variously rendered as “*did he do it* or *pity to do it*” leading to colloquial names like the *did-he-do-it* bird. Usually seen in pairs or small groups not far from water but may form large flocks in the non-breeding season (winter).

Green Bee-eater (*Merops orientalis*)



As the name suggests, **Bee-eaters** predominantly eat flying insects, especially bees and wasps, which are caught in the air by sallies from an open perch. While they pursue any type of flying insect, honey bees predominate in their diet. Bee-eaters are gregarious. They form colonies by nesting in burrows tunneled into the side of sandy banks, such as those that have collapsed on the edges of rivers. Their eggs are white and they generally produce 2-9 eggs per clutch (depending on species). As they live in colonies, large numbers of these holes are often seen together, white streaks from their accumulated droppings accentuating the entrances to the nests. Most of the species in the family are monogamous, and both parents care for the young, sometimes with the assistance of other birds in the colony, a behavior considered unusual for birds.

House Crow (*Corvus splendens*)



The forehead, crown, throat and upper breast are a richly glossed black, whilst the neck and breast are a lighter grey-brown in colour. The wings, tail and legs are black. There are regional variations in the thickness of the bill and the depth of colour in areas of the plumage. It has a widespread distribution in southern Asia, being native to Nepal, Bangladesh, India, Pakistan, Sri Lanka, Maldives and Laccadive Islands. Crows feed largely on refuse around human habitations, small reptiles and other animals such as insects and other small invertebrates, eggs, nestlings, grain and fruits. They are highly opportunistic birds and given their omnivorous diet, they can survive on nearly anything that is edible. These birds can be seen near marketplaces and garbage dumps, foraging for scraps.

House Sparrow (*Passer domesticus*)



The **House Sparrow** (*Passer domesticus*) is a bird of the sparrow family Passeridae, found in most parts of the world. A small bird, it has a typical length of 16 cm. The House Sparrow is strongly associated with human habitations, and can live in urban or rural settings. Though found in widely varied habitats and climates, it typically avoids extensive woodlands, grasslands, and deserts away from human development. It feeds mostly on the seeds of grains and weeds, but it is an opportunistic eater and commonly eats insects and many other foods. Its predators include domestic cats, hawks, owls, and many other predatory birds and mammals.

Common Myna (*Acridotheres tristis*)



The **Common Myna** or **Indian Myna** (*Acridotheres tristis*), sometimes spelled Mynah, is a member of the family Sturnidae (starlings and mynas) native to Asia. An omnivorous open woodland bird with a strong territorial instinct, the Myna has adapted extremely well to urban environments. The Common Myna is readily identified by the brown body, black hooded head and the bare yellow patch behind the eye. The bill and legs are bright yellow. There is a white patch on the outer primaries and the wing lining on the underside is white. The sexes are similar and birds are usually seen in pairs.

Purple Sunbird (*Cinnyris asiaticus*)



The Purple Sunbirds and Spider hunters are very small passerine birds. The family is distributed throughout the Indian Subcontinent, Southeast Asia, Africa and just reaches northern Australia. Most sunbirds feed largely on nectar, but also take insects and spiders, especially when feeding young. Flower tubes that bar access to nectar because of their shape, are simply punctured at the base near the nectaries. Fruit is also part of the diet of some species. Their flight is fast and direct on their short wings.

Gray Langur (*Semnopithecus* sp.)



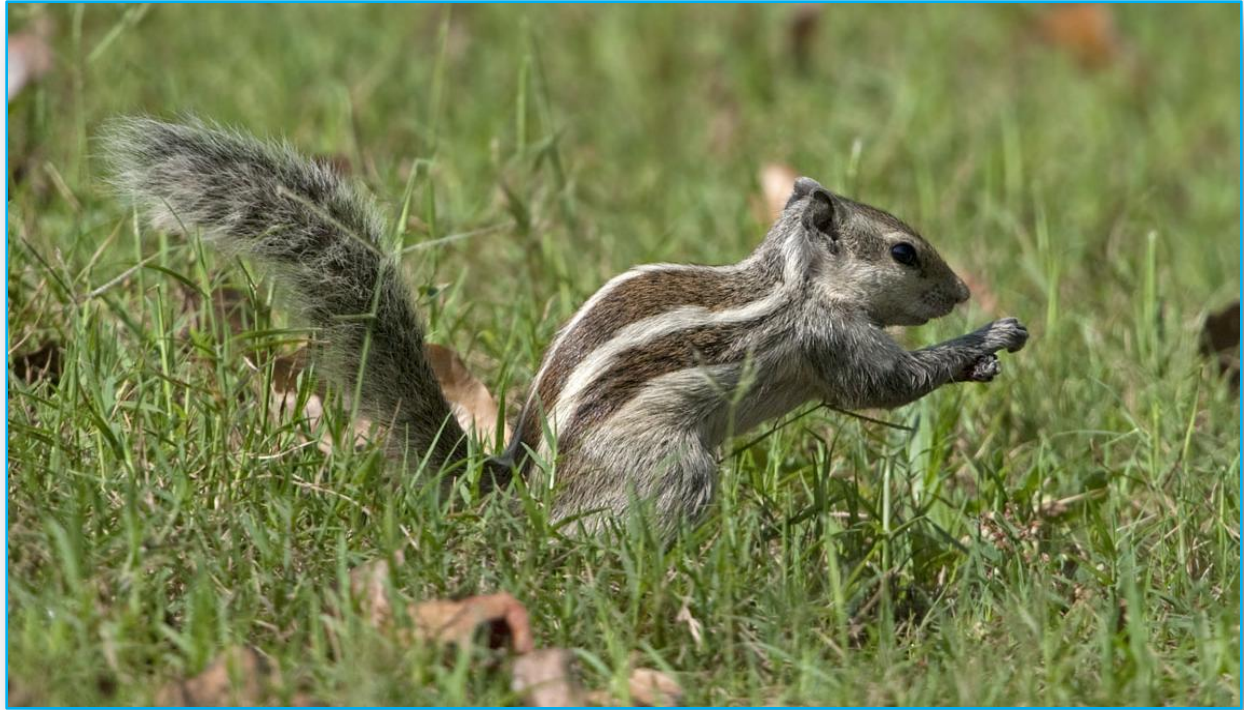
Gray langurs or Hanuman langurs, the most widespread langurs of the Indian Subcontinent, are a group of Old World monkeys constituting the entirety of the genus *Semnopithecus*. These langurs are largely gray (some more yellowish), with a black face and ears. Externally, the various species mainly differ in the darkness of the hands and feet, the overall color and the presence or absence of a crest. There are also significant variations in the size depending on the sex, with the male always larger than the female. Langurs mostly walk quadrupedally and spend half their time on the ground and the other half in the trees. They will also make bipedal hops, climbing and descending supports with the body upright, and leaps.

Rhesus Macaques (*Macaca mulatta*)



The **Rhesus Macaque** (*Macaca mulatta*), also called the **Rhesus monkey**, is one of the best-known species of Old World monkeys. It is listed as Least Concern in the IUCN Red List of Threatened Species in view of its wide distribution, presumed large population, and its tolerance of a broad range of habitats. Native to South, Central and Southeast Asia, troops of *Macaca mulatta* inhabit a great variety of habitats from grasslands to arid and forested areas, but also close to human settlements. The rhesus macaque is brown or grey in color and has a pink face, which is bereft of fur.

Indian Squirrel (*Funambulus pennantii*)



The **Indian squirrel** is about the size of a rat, with a bushy tail slightly shorter than its body. The back is a grizzled, gray-brown colour with three conspicuous white stripes which run from head to tail. The two outer stripes run from the forelegs to the hind legs only. It has a creamy-white belly and a tail covered with interspersed, long, black and white hairs. The ears are small and triangular. Juvenile squirrels have significantly lighter coloration, which gets progressively darker as they age. It is fairly common in urban areas, even in large cities such as Delhi and Kolkata.

Thank You