



27 July, 2020
Volume 1, Issue 5

PRAKRITI

Quest for nature





Central Academy of State Forest Service

Flora of the week

Calotropis Procera (Akra)

Calotropis Procera is a species of flowering plant in the family Apocynaceae that is native to north Africa, tropical Africa, western asia, south asia and Indochina.the green fruit contain a toxic milky sap that is extremely bitter and turns into a gluey coating which is resistant to soap.



Kingdom	Plantae
Order	Gentianales
Family	Apocynaceae
Genus	<i>Calotropis</i>
Species	<i>procera</i>

Benefits of Calotropis:

Leaves of calotropis provide relief to the pain. Due to which these leaves are tied on the swelling area and joint pain area. Sprinkle the powder of leaves on wounds it will heal the wound immediately.

If the milk of calotropis mix with the olive oil and apply on the bald patches and ringworms it proves beneficial. If the milk of aak with honey in an equal amount then it will cure the very old eczema.

The milk of madar is useful for the poisoned area where the Scorpio, honey bee, yellow bee, and other poisonous insects bite. If the snake bites then put the milk of aak in drops on the poisoned area.

According to Ayurveda, it is hot in nature and leads to dysentery problem. It is helpful in phlegm (Cough) diseases, itching, leprosy, boil fur, and stomach related problems. If you will take the smoke of the leaves of calotropis then it will be beneficial for the asthma patients.

Another variety of Calotropis **procera** is Calotropis gigantean. It is known as Arka in Sanskrit. It is widely used in many Ayurvedic treatments, both externally (ksharasutra) and internally. It is a very common herb seen widely throughout India. It is called as Madar in English.

Medicinal properties:

In the traditional Indian **medicinal** system, the Calotropis **procera** has been used for a variety of disease conditions that includes its use in the treatment of leprosy, ulcers, piles and tumors. The root extract of C. **procera** has been found to produce a strong cytotoxic effect on COLO 320 tumor cells. People use the bark and root bark for medicine. Despite serious safety concerns, calotropis is used for **digestive disorders** including diarrhea, constipation and stomach ulcers; for painful conditions including toothache, cramps, and joint pain; and for parasitic infections including elephantiasis and worms.



Central Academy for State Forest Service
Dehradun

FAUNA OF THE WEEK

Hoolock hoolock

Hoolock Gibbon



Gibbon (*Hoolock hoolock*): Male (black) & female (brown)

Scientific classification

Kingdom -	Animalia
Phylum -	Chordata
Class -	Mammalia
Order -	Primates
Family -	Hylobatidae
Genus -	<i>Hoolock</i>
Species -	<i>hoolock</i>

WPA 1972, Schedule 1, IUCN-endangered



Mating behavior-

Typically monogamous, living in mating pairs with off-springs. Their off-springs become physically independent at about 3 years, & physically mature at 6 years age.

Introduction:

Hoolock gibbons are only ape found in India, native to Northeast India, eastern Bangladesh, Myanmar and southwest China. In northeast India, the Hoolock is found south of Brahmaputra as well as on the north bank areas and east of the Dibang River. Its range extends into seven states covering Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura.

Habitat-

They are exclusively forest dwelling and dependent on a contiguous canopy. They are found in broad leaved, moist deciduous forest and mixed evergreen forest with tall deciduous trees.

Morphology:

Hoolock gibbon is tailless like other apes. They possess a tuft of hair in the anogenital region. Sexual dichromatism is seen between males and females. Males and young females are blackish with white eyebrows while matured females are brownish or yellowish grey with white stripes above eyes. Their arms are longer than legs. Height is approximately 3 feet.

Diet:

Omnivorous, figs dominate and fruits are very important however lianas, bud, flowers, shoots, petioles, exudates nectar, and other plant foods including lichens but most preferably fig fruits and sometimes insects.

Ecology:

Diurnal Hoolock Gibbons are usually active, starting at dawn or in the early morning for 8-10 hours each day. They awake earlier in the summer than in the winter. As they leave their sleeping sites, usually defecate and urinate. Calling occurs only before noon and usually in the early morning. Different calling pattern for different activity like territorial call, group call etc. the home range of Hoolock Gibbons are up to 3 to 4 km².

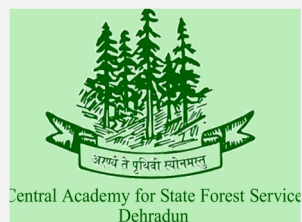
Interesting facts:

Gibbons are highly intelligent and social animals can recognize themselves in the mirrors. They are able to communicate via various songs. Often retains same mate for life. They are very acrobatic and use their long arms to travel between trees. Gibbons are mostly known for their shrill calls. In Nagaland and Assam, there was once a time when people calculated the time of the day according to the howls and hootings of the Gibbon.

BIRD OF THE WEEK

Antigone antigone

(Sarus crane)



Sarus crane is found in parts of the Indian subcontinent, South-east Asia, and Australia. It is a non migratory crane. Indian sarus crane lives in northern and central India, Pakistan and Nepal. The Eastern Sarus crane used to live throughout Southeast Asia but now is confined to Vietnam and Cambodia, with a small population in Myanmar. The Australian Sarus crane lives in northern Australia.

HABITAT

Live mainly in wetlands such as canals, marshes and ponds, sometimes near agricultural field

CHARACTERISTICS

Height: ~ 176 cm, 5.8 – 6 ft

Weight: ~ 6.35 kg, 14 lbs

Population: ~ 15K – 20K

Life span—30-40 Years

Status: IUCN: VU

Kingdom:	Animalia
Phylum:	Chordata
Class:	Aves
Order:	Gruiformes
Family:	Gruidae
Genus:	<i>Antigone</i>
Species:	<i>A. antigone</i>



Image location- Fatehpur, Uttar Pradesh, India

SUBSPECIES:

antigone – Indian
sharpii – Eastern
gilli – Australian

IDENTIFICATION

Adults – Light grey body plumage, greenish skin crown, the rest of the head and upper neck are covered with red skin, ear is covered by a small area of greyish feathers, legs are red.

Juveniles – Cinnamon brown feathers, and the greyish ear patch is not present.



DIET

Aquatic plants, invertebrates, grains, small vertebrates and insects

BREEDING

Monogamous-Birds mate for life, Breeding is inland, but always in a wet area, Reproduction season-June to September, Incubation Period-31– 34 days, Independent age- 85-100 days, Baby carrying- 2 eggs

FUN FACT

The Sarus Crane is the tallest flying bird in the world

THREATS

Water diversions and unsustainable conversion of wetlands, habitat loss, poisoning, human disturbance, collisions with power lines, invasive species and changes in agricultural practices