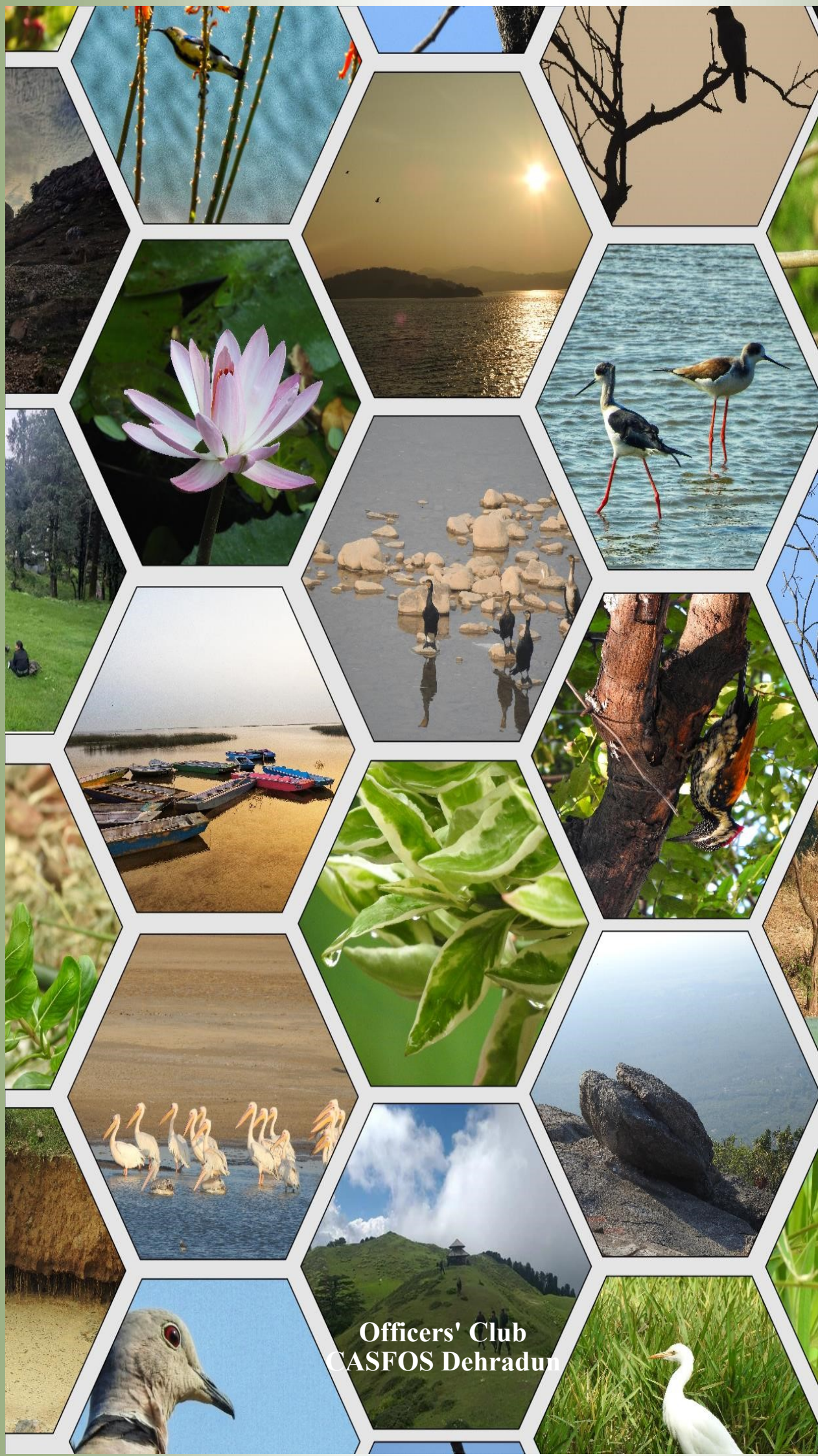




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PRAKRITI

Quest for nature



Officers' Club
CASFOS Dehradun



Central Academy for State Forest Service
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FLORA OF THE WEEK

Physalis minima

(Wild cape gooseberry)

Sunberry is an erect, much-branched, annual plant growing around 50cm tall. The edible fruit is sometimes gathered from the wild and used locally, The plant also has a range of medicinal uses.

Physalis minima is a species of perennial herbs belonging to the family Solanaceae. Native gooseberry, wild cape gooseberry and pygmy groundcherry are some of the popular common names in English. It is a pantropical annual herb 20–50 cm high at its maturity. It can be found near the marshes of Java.

Leaves are soft and smooth (not furry), with entire or jagged margins, 2.5–12 cm long. Cream to yellowish flowers are followed by edible yellowish fruit encapsulated in papery cover which turns straw brown and drops to the ground when the fruit is fully ripe. The plant tends to have a weedy character, often found growing in disturbed sites.

Physalis (Cape gooseberry) is native to South America in the high altitude tropical Colombia, Ecuador, Peru and Chile where the fruits are found growing wild.



Medicinal:

All parts of the plant are used as a diuretic & antipyretic. The fruit is said to be alterative, appetizer, bitter, diuretic, laxative and tonic. The pounded leaves are used as a remedy for headache and itches.

The juice of the leaves, mixed with mustard oil and water, has been used as a remedy for earache.

The root is febrifuge and vermifuge. An extract of the root is taken for fevers, whilst the root is chewed to act as a vermifuge.

A decoction of the roots is drunk to treat hypertension and diabetes. The roots are chewed and applied as a poultice to the lower abdomen in order to reduce pain. Extracts from the plant have shown anti-cancer activity.

Kingdom:	Plantae
Class:	Monocotyledonae
Order:	Polymaniales
Family:	Solanaceae
Genus:	<i>Physalis</i>
Species:	<i>minima</i>

Distribution-

Physalis minima Linn. is commonly found on the bunds of the fields, wastelands, around the houses, on roadsides, etc., where the soil is porous and rich in organic matter. It is an annual herbaceous plant having a very delicate stem and leaves. It is found growing in the sub-Himalayas up to altitudes of 1,650 metres.



How to Eat:

Fruit Salads: Fruits can be consumed raw in fruit cocktails, fruit salads, jams.

Puddings, pies: The fruit is perfect for snacks as well as for making puddings, pies, sauces, jellies, ice cream, preserves, chutneys and glazes for meat and seafood.

Raisin: The fruit can also dry into tasty "raisins".

Fruits are also an attractive sweet whenever dipped in chocolate or other coatings or pricked and rolled in sugar.



Recipe:

Take 2-3 leaves

Boil in one litre water with half spoon of turmeric

Boil until the water reduced to 1/3rd

Drink the tea once in a day.

Nutritional Value:

Apart from their taste, *Physalis* is a good source of nutrients, minerals, vitamins. Consuming 140 gram of this fruit supplies, 3.92 mg of Vitamin B3, 1.4 mg of Iron, 15.4 mg of Vitamin C, 0.154 mg of Vitamin B1, 15.68 g of Carbohydrate, 56 mg of Phosphorus, 50 µg of Vitamin A, 2.66 g of Protein..

Precautions:

The unripe fruit is supposed to be poisonous to some people.

The plant is assumed to have caused illness as well as death in cattle in Australia.



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FAUNA OF THE WEEK

Panthera leo

Lion

Lions are a well-muscled cat with long body, large head and short leg. The male's outstanding characteristics are his mane, it may fringe the face or it may cover the face and it may be full or shaggy. In some lions the mane is very dark appearing almost black which gave them a very majestic look. The Lion's coat is short and varies in colour from buff yellow, orange brown or silvery grey to dark brown. World Lion Day is observed on August 10 every year. It aims to create awareness and gather support for lion conservation. India's lion population has increased from 523 in 2015 to 674 in 2020.

Reproduction and Development

Gestation period- 110 days

Litter size- 3 to 6

Weaning – 6 or 7 months

Sexual maturity- 2 years

Lifespan- up to 15 years in wild and up to 30 years in captivity



Source: Internet

AMAZING FACTS:

- ✚ LIONS ARE SOCIAL
- ✚ FEMALE LIONS DO MOST OF THE HUNTING, WHILE MALES ARE RESPONSIBLE FOR PROTECTING THE PRIDE
- ✚ LIONS DO NOT NEED TO DRINK EVERYDAY, BUT THEY DO NEED TO EAT
- ✚ LIONS ARE FANTASTIC HUNTERS
- ✚ LIONS DO NOT LIVE IN JUNGLES
- ✚ LIONS COMMUNICATE IN MANY WAYS
- ✚ FEMALE LIONS RAISE CUBS TOGETHER
- ✚ LION CUBS HAVE TWO OTHER NAMES: "whelps" and "lionets".
- ✚ LIONS ARE THE SECOND LARGEST CATS ON EARTH
- ✚ LIONS ARE UNDER THREAT

WPA, 1972: Schedule I IUCN Status: Vulnerable

Kingdom	Animalia
Phylum	Chordata
Class	Mammalia
Order	Carnivora
Family	Felidae
Sub family	Pantheridae
Genus	<i>Panthera</i>



ECOLOGY AND BEHAVIOUR: They are unique as they live in group or pride. A pride consists of several generation lionesses, a small number of breeding males and their cubs. Each pride has a core area in their territory which is strictly protected against any intruding lions. They proclaim their territory by roaring and by scent marking. Their territory varies on the abundance of prey population.

Lions hunt many wild animals but they predominantly hunt medium to large sized hoofed animals such as wildebeests, Zebras and antelopes. An adult male can consume more than 34 kg of meat in a single meal and rest for a week before resuming the hunt. Hunting is usually for 2 to 4 hrs. if prey is abundant.

World Lion Day is the brainchild of co-founders Dereck and Beverly Joubert, a husband-and-wife team with a passion for big cats. They began the initiative in 2013, bringing together both National Geographic and the Big Cat Initiative under a single banner to protect the remaining big cats living in the wild.

Lions are the second-largest cat in the world, just behind the Asian tiger. These immense creatures, weighing between 300 and 550 pounds, have sparked the popular imagination for centuries, inspiring awe through their speed and muscular power.

According to the International Union for the Conservation of Nature, lions are a "vulnerable" species, meaning that their numbers could and should be higher. Currently, researchers estimate that there are between 30,000 and 100,000 lions left on planet Earth at risk of extinction.

World Lion Day, therefore, is an opportunity for lion lovers all over the planet to push back against the decline in the range and habitat of the king of beasts. These giant animals are among the world's largest land species and an apex predator with a reputation like no other. It would be a tragic loss for both nature and humanity if the species were to disappear entirely from the natural environment.

HABITAT AND DISTRIBUTION: They live in a variety of habitat but prefer grassland, savanna, dense scrub and open woodland. Historically, they range across Europe, Asia and Africa. Now, they are found mainly in parts of Africa, south of Sahara. A small population is found in Gir National Park, India.





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BIRD OF THE WEEK

Neophron percnopterus

Egyptian vulture

Physical Description;

Egyptian/ White Scavenger vulture/ Pharaoh chicken is a small Old World Vulture white coloured heads and backs. Flight feathers are darker, near black in colour. Individuals have a collared-look of spiked feathers around the neck and a featherless face with yellow face and beak. Sexually immature birds are uniformly brown. Average mass 1889 g Average length 68 cm Range wingspan 1.68 (low) m.

Reproduction: Monogamous but Extra-pair copulation recorded

- > Lifespan (in captivity); 37 years
- Breeding interval
- > Egyptian vultures breed once yearly.
- > Average fledging age: 82 day
- > Age at sexual maturity ;6 years
- > Range eggs per season: 1 to 3



Fun Facts:

Egyptian vultures are one of the very few species that use tools. To crack open big thick-shelled eggs like ostrich eggs, an Egyptian vulture will walk up to hundreds of meters to find a rock which it throws in a characteristic manner at the egg to break it so it can eat the contents.

Egyptian vultures can fly up to 80 miles in search of food.

Venerated in ancient Egypt for its role as a scavenger, a Pharaoh would punish people with death if they killed an Egyptian vulture, and the bird became known as "Pharaoh's child".

WPA, 1972: Schedule I IUCN Status: Endangered

Kingdom	Animalia
Phylum	Chordata
Class	Aves
Order	Accipitriformes
Family	Accipitridae
Genus	<i>Neophron</i>
Species	<i>percnopterus</i>

Natural scavenger



Behavior and Ecology:

The Egyptian vulture is usually seen singly or in pairs, soaring in thermals along with other scavengers and birds of prey, or perched on the ground or atop a building. On the ground, they walk with a waddling gait. They feed on a range of food, including mammal faeces (including those of humans), insects in dung, carrion, vegetable matter, and sometimes small animals. When it joins other vulture species at a dead animal, it tends to stay on the periphery and waits until the larger species leave. Studies suggest that they feed on ungulate faeces to obtain carotenoid pigments responsible for their bright yellow and orange facial skin. The ability to assimilate carotenoid pigments may serve as a reliable signal of fitness.

Distribution and migration:

N. percnopterus: in southern Europe, northern Africa, the Middle East, Central Asia, and the north-west of India. *N. ginginianus*: only Indian subcontinent. *N. majorensis*: in canary island. Some Migrating birds can cross long water body (Iberian and strait of Gibraltar) cover 500 kilometres a single day until they reach Sahara, Breeding pairs may return to the same nesting site for many consecutive years.

Threats and conservation:

Human activities, power lines, hunting, poisoning, lead & pesticide accumulation in carcasses, Ban on diclofenac, Creation of "vulture restaurants" where carcasses are made available.

