

1.

one of the  
largest bats in  
the world  
IUCN → Least Concern

Bat species

→ native to Indian  
Subcontinent

→ large size and fox  
like facial feature

→ Dark brown, black  
body → yellow mantle



\* Males

→ larger than female

→ CITES → Appendix II

Wildlife Protection Act  
1972 → Schedule II

Indian Flying Fox  
Bat

*Pteropus Giganteus*

\* nectar and fruit  
eating

Endemic to  
→ South Central Asia  
→ Pakistan  
→ China  
→ Maldives  
Highly Social Creature

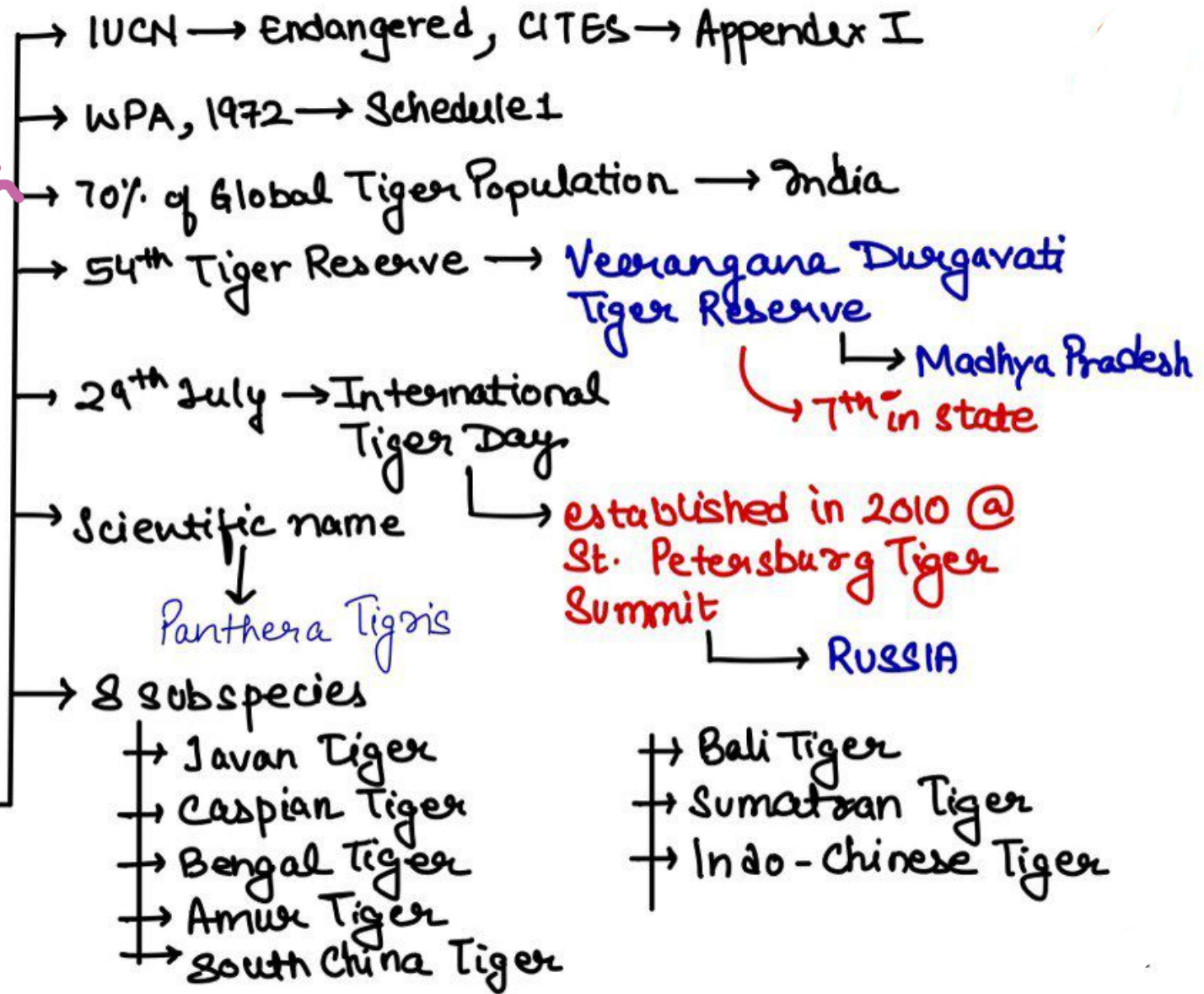
2.

9. Consider the following pairs :

- ✓ 1. Dampa Tiger : Mizoram Reserve
- 2. Gumti Wildlife : Sikkim Sanctuary
- ✓ 3. Saramati Peak : Nagaland

Which of the above pairs is/are correctly matched?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3





3.

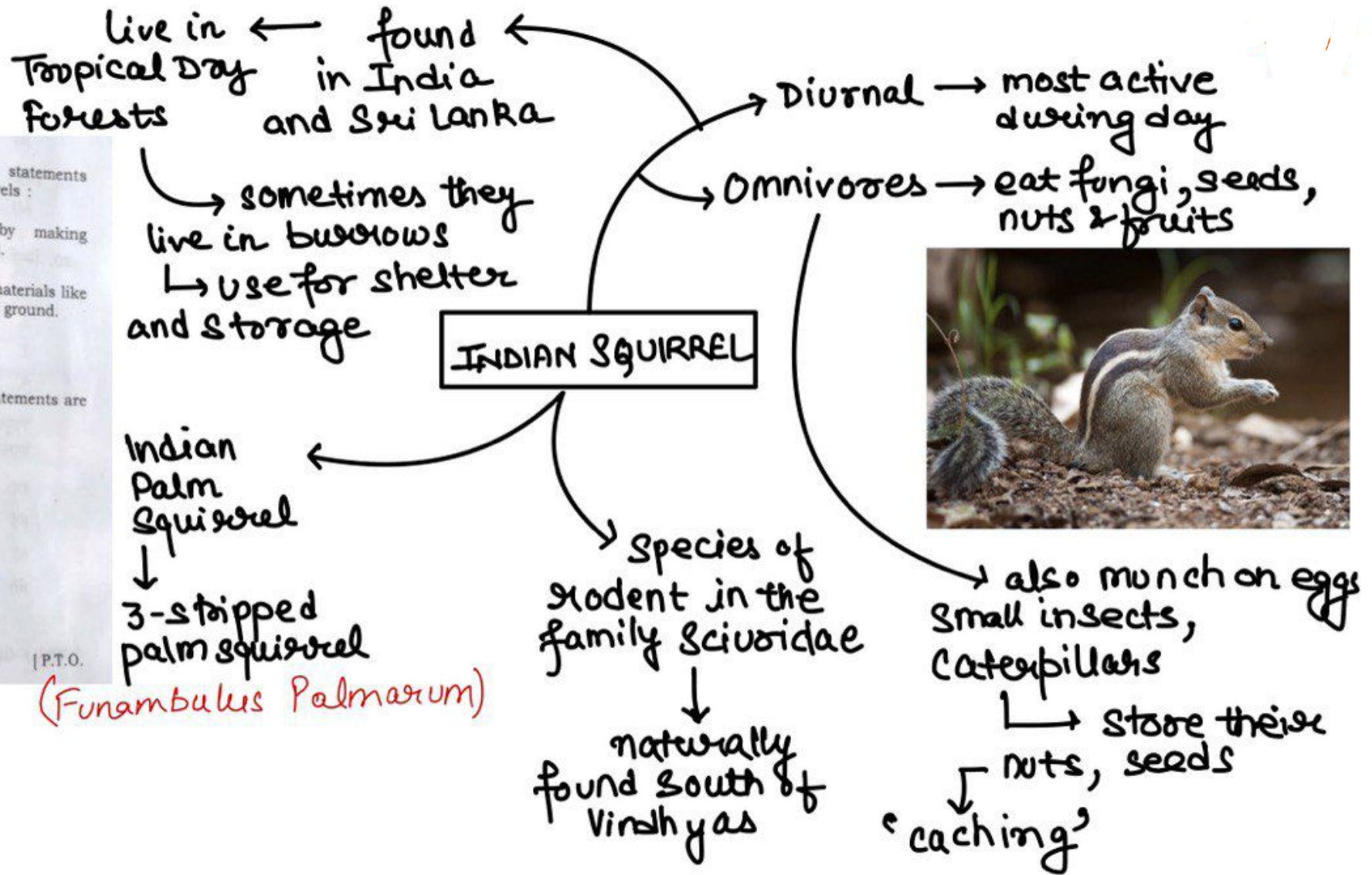
27. Consider the following statements regarding the Indian squirrels :

1. They build nests by making burrows in the ground.
2. They store their food materials like nuts and seeds in the ground.
3. They are omnivorous.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

[P.T.O.]



4.

94. With reference to India's biodiversity, Ceylon frogmouth, Coppersmith barbet, Gray-chinned minivet and White-throated redstart are

- (a) Birds
- (b) Primates
- (c) Reptiles
- (d) Amphibians



Coppersmith Barbet

→ Crimson-breasted barbet  
→ Bird Species  
→ IUCN → Least Concern  
→ found in Indian Subcontinent



Ceylon frogmouth

→ Sri Lanka Frogmouth  
→ Bird Species

*Batrachostomus moniliger*

→ Western Ghats  
→ IUCN status

→ Least Concern



→ India, Nepal, Bhutan, China

→ IUCN → Least concern

*(Phoenicurus schisticeps)*

← found from Himalayas to China

→ Bird Species  
→ IUCN

→ Least Concern



Gray Chinned Minivet

*(Ptilinopus solarius)*  
→ biological name



5.

\* Use of European Honeybees as bio monitoring agents

Which of the following organisms perform waggle dance for others of their kin to indicate the direction and the distance to a source of their food?

- (a) Butterflies
- (b) Dragonflies
- (c) Honeybees
- (d) Wasps

requires social learning

communicates

quality

direction

distance

signaling

of a resource to nestmates by encoding celestial cues, retinal optic flow into motion & sound within nest.

spatial referential communication

\* last honey bee discovered from India → Apis Indica → 1798



Apis karinjodian

IUCN — Near Threatened

discovered from Western Ghats

Indian Black Honeybee

produce a thicker honey which allows for ↑ honey production

6.

95. Which one of the following protected areas is well-known for the conservation of a sub-species of the Indian swamp deer (Barasingha) that thrives well on hard ground and is exclusively graminivorous?

- (a) ☒ Kanha National Park
- (b) Manas National Park
- (c) Mudumalai Wildlife Sanctuary
- (d) Tal Chhapar Wildlife Sanctuary



→ can be seen in:

- a) Dudhwa National Park → U.P
- b) Kanha National Park → MP
- c) Pilibhit Tiger Reserve → U.P

→ extinct in Pakistan & Bangladesh

→ Barasingha → deer species found in India and Nepal

→ Appendix I of CITES and Schedule I of WPA, 1972

→ IUCN → Endangered

→ Assamese → known as Dalhorina  
↓  
Swamp



1.

Are long lived animals  
[Up till 73 yrs]

largest population of sea cows → found in northern waters of Australia

19. With reference to 'dugong', a mammal found in India, which of the following statements is/are correct?

1. It is a herbivorous marine animal.
2. It is found along the entire coast of India.
3. It is given legal protection under Schedule I of the Wildlife (Protection) Act, 1972.

Select the correct answer using the code given below.

- (a) 1 and 2
- (b) 2 only
- (c) 1 and 3
- (d) 3 only

animal getting its energy from eating plants

\* WPA, 1972 → Schedule I

\* CITES: Appendix I

IUCN  
↓  
Vulnerable

warm coastal waters of Indian & Pacific Oceans



2<sup>nd</sup> largest population is found in Arabian Gulf

Dugong

inhabit shallow waters → has tapered body

Sea cow → herbivorous mammal

8-

23. Consider the following animals :

1. Hedgehog
2. Marmot
3. Pangolin

To reduce the chance of being captured by predators, which of the above organisms rolls up/roll up and protects/protect its/their vulnerable parts?

- (a) 1 and 2
- (b) 2 only
- (c) 3 only
- (d) 1 and 3



IUCN: Least Concern

Hedgehog → small mammals  
 ↓  
 If attacked  
 ↓  
 will curl into a prickly ball → to deter predators  
 Short limbs  
 ↓  
 sharp spines

Rodent ← Marmot  
 ↓  
 3-7 kg  
 ↓  
 well suited for life in cold environments



↓  
 absence of scales/spines  
 ↓  
 do not roll up & protect themselves



Pangolin  
 Schedule I  
 Part I  
 ↓  
 WPA 1972

Indian Pangolin  
 → nocturnal } mammals  
 toothless  
 ↓  
 dig burrows → feed on ants & termites  
 → only scaly mammals  
 → uses these scales as armor to defend itself against predators

\* IUCN → Endangered

\* Bangladesh, India, Nepal, Pakistan, Sri Lanka

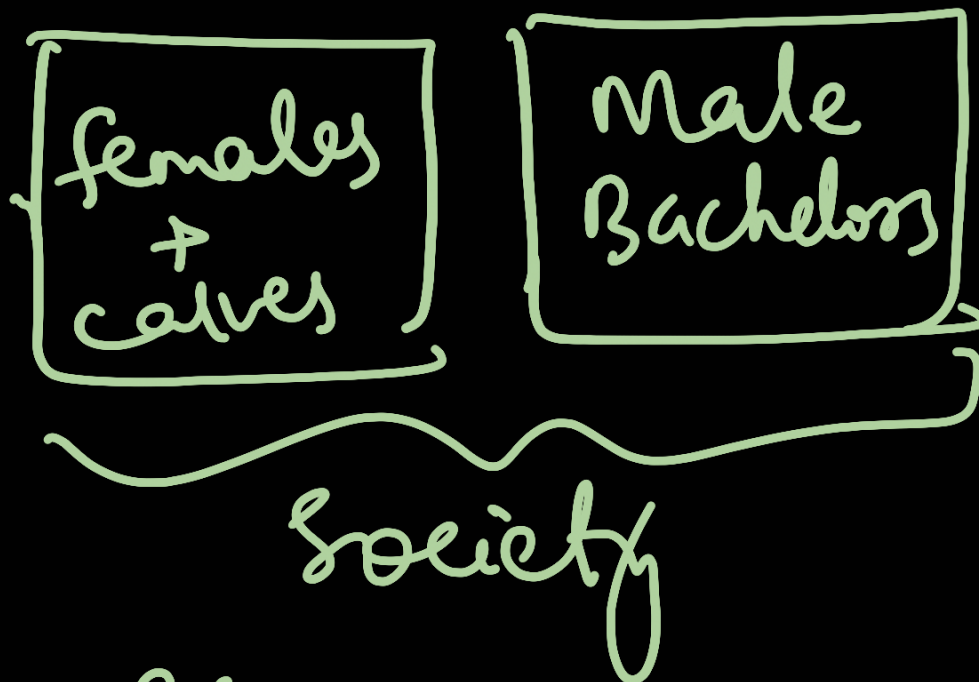


2020 Q72.

## Elephant

\* largest mammals on earth

• Matriarch



• Calf every 4-5 years

12 month pregnancy

— longest of any mammals

Kavango Zambezi Transfrontier Conservation Area (KAZA),  
the world's largest terrestrial conservation landscape, which

harbors more than half of Africa's elephants, WWF aims to secure a future for these animals and other wildlife by supporting the work of the KAZA Secretariat and the five KAZA partner countries (Angola, Botswana, Namibia, Zambia, and Zimbabwe)

TRAFFIC manages a global record of ivory seizures, called the Elephant Trade Information System (ETIS), that helps to identify routes and countries of particular importance in illegal trade.

## Thirty Hills

WWF and partners are securing protection for a critical rain forest in Sumatra. Thirty Hills is one of the last places on Earth where elephants, tigers, and orangutans coexist in the wild.

# Cheetah

## 1. THERE ARE 5 RECOGNISED SUBSPECIES OF THE CHEETAH

The wild Cheetah population is believed to be around 6,600 mature individuals and decreasing. They are currently classified under the genus *Acinonyx*, whose closest living relatives are cougars and jaguarundis—both wild cats are native to the Americas. Altogether, 5 subspecies of cheetah have been described:

1. Northwest African cheetah *Acinonyx jubatus hecki*
2. East African cheetah *Acinonyx jubatus fearsoni* (or *A.j. raineyi*)
3. South African cheetah *Acinonyx jubatus jubatus*
4. Northeast African cheetah *Acinonyx jubatus soemmerringi*
5. Asiatic cheetah *Acinonyx jubatus venaticus*

All cheetah subspecies are listed as vulnerable by the IUCN, except the Northwest African and Asiatic cheetah which are critically endangered at present.



Cheetahs are blisteringly fast and can reach speeds up to 64 miles per hour in 3 seconds, making them the fastest land animals in the world over short distances. For comparison with humans, Usain Bolt currently holds the record as the fastest man in the world, with a top speed of around 27 miles per hour. A cheetah can outpace the world's fastest man by more than twice his speed, whether in the wild or on a race track!

But when it comes to endurance, these slender big cats can only maintain their top speed for a short period of time depending on their health and energy levels, as well as the weather and ground conditions. So, cheetahs are known to abandon their hunt even though their body temperatures remain relatively stable when chasing their prey.

---

Cheetahs hunt a wide variety of prey, mainly small to mid-sized ungulates, which include springbok, duiker, gazelle, kob and impala. But they can also prey on ground-dwelling birds and small mammals such as hares. Male cheetahs are known to form coalitions for territorial protection and hunt much larger prey, such as wildebeest, kudu or eland.

Unlike other African predators, cheetahs rarely scavenge. They are also known to eat quickly and abandon their kills once other predators are spotted, especially in areas with high densities of large carnivores—around 10% of cheetah kills end up being stolen, mostly by lions and spotted hyenas. This could explain why cheetahs prefer to hunt during the day when other predators are least active.

## 4. IS IT A CHEETAH OR A LEOPARD?

Cheetahs are commonly misidentified as leopards, and vice versa, since both big cats have prominent yet similar dark spots on their bodies. But it can get easier to distinguish between a cheetah and a leopard once you know what to look for. Cheetahs boast a pair of dark-coloured curved lines running between their nose and cheeks, while leopards don't have any unique face markings. The spots on their bodies also differ: the cheetah's fur is covered with round or oval-shaped spots, whereas the leopard has distinctive spots on its fur called 'rosettes', resembling the shape of a rose.

A cheetah is slender, lighter and taller than a leopard, and it also has semi-retractable claws, allowing for swift movements when chasing prey at high speeds. Leopards, on the other hand, are shorter but bulky and powerful big cats with retractable claws, making them excellent tree climbers. Vocally, cheetahs chirp almost like a bird, while leopards roar like other big cats.

## Cheetah

dark curved  
line b/w nose  
& cheek

Round or oval  
spots

Slender, light,  
taller

Semi retractable  
claw

Chirps like a  
bird

## Leopard

No unique  
face mark

Rosette spots

Short  
bulky

Retractable  
claw

↓  
excellent tree  
climbers

Roar



# Snow leopard

\* Bcoz of incredible natural camouflage.

\* long tail gives balance & protect from cold

12 countries across Asia: Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyz Republic, Mongolia, Nepal, Pakistan, Russia, Tajikistan, and Uzbekistan

60% in china

\* Lead of snow project by WWF in Mongolia

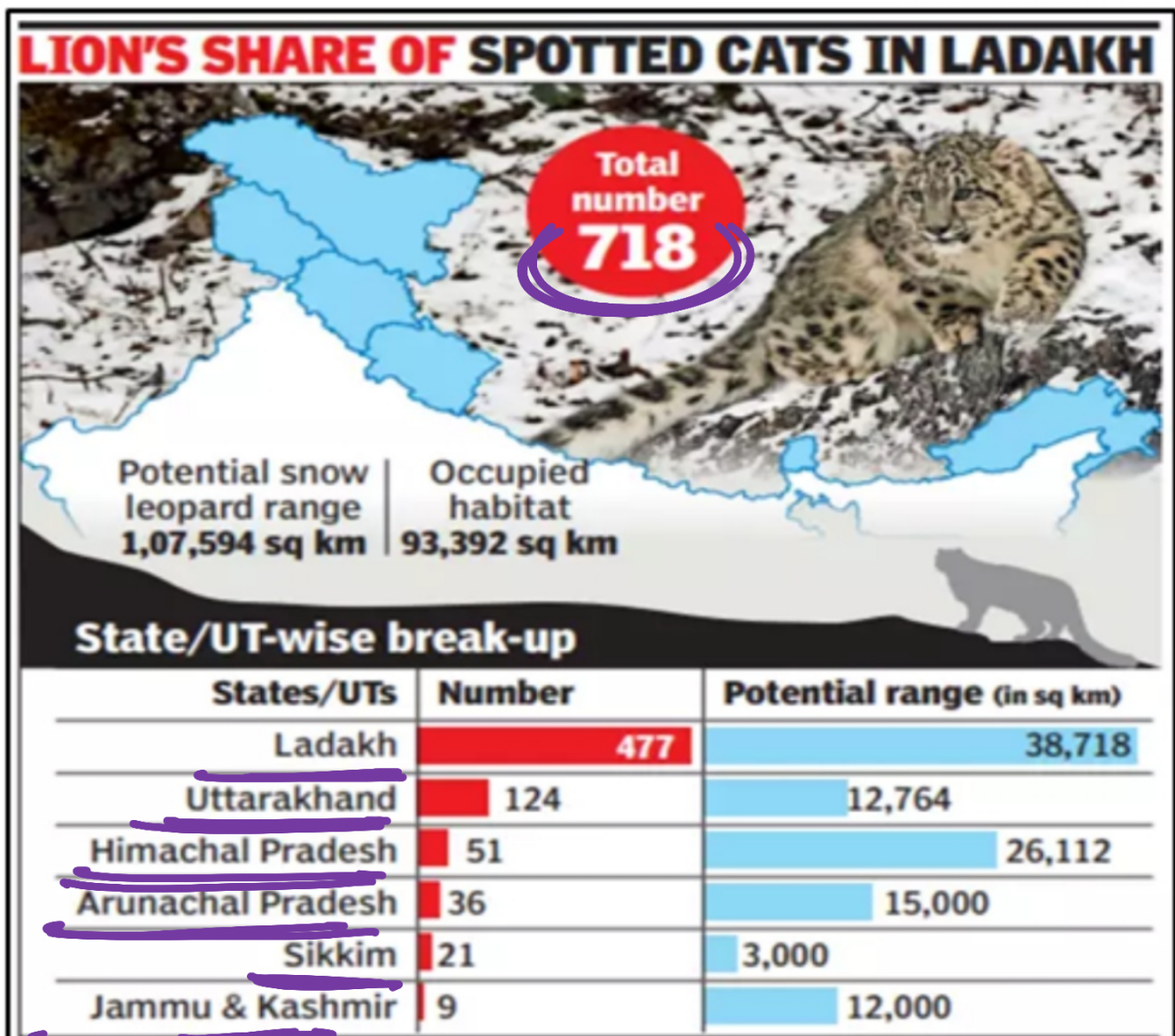
- Third Pole GeoLab

WWF developed and launched Third Pole GeoLab, an interactive web-based tool and database for snow leopard conservation, climate change, and water security issues in Asia's high mountains, as part of our USAID-funded project, Conservation and Adaptation in Asia's High Mountain

## What is the Snow Leopard Population Assessment in India (SPAI) Program?

- The Wildlife Institute of India (WII) is the National Coordinator for this exercise that was carried out with the support of all snow leopard range states and two conservation partners, the Nature Conservation Foundation, Mysuru and WWF-India.
- The SPAI systematically covered over 70% of the potential snow leopard range in the country and the SPAI exercise was conducted from 2019 to 2023 using a meticulous two-step framework.
  - The first step involved evaluating Snow leopard spatial distribution, through an occupancy-based sampling approach in the potential distribution range.
  - In the second step, Snow leopard abundance was estimated using camera traps in each identified stratified region.

## Findings of the SPAI Program





Ladakh  $>$  UK  $>$  HP  $>$  A&P  $>$   
(~500) (125) 814km  $>$  J&K

\*  $\frac{1}{6}$ th of global popul<sup>n</sup> in India

## Amur leopard

- \* Rarest big cats in India
- \* 125 Russia  $\rightarrow$  45 China
- \* Have summer & winter fur  
(2cm) (8cm)
- \* Nocturnal & solitary. So need infrared camera to shoot

- tail for warmth
- climb tree - Camouflage ✓



© naturepl.com / Lynn M. Stone / WWF

## 9. THEY'RE WELL ADAPTED WHEN IT COMES TO DINNER

The tongue of an Amur leopard has sharp-pointed rasps, called papillae, which are used to scrape the meat off the bones of its prey.



© Land of the National Park

## 10. COOL CUBS

Amur leopards don't have a specific breeding season, their gestation period last around 12 weeks and the females give birth to a litter of 2-3 cubs. The cubs are born blind and weigh around just half a kilogram. As they're so vulnerable when they're first born the mother keeps her cubs hidden for around 6-8 weeks.



# Lion (vv)

\* Habitat: Savanna, shrubland, semi arid desert

\* Social animal - live in pride *that's why king*

\* Lioness are 1<sup>o</sup> hunters

\* Sleep 20hr/day

\* Hunt during night

\* Will get water from poey - Can drink from plants like Tsamma melon too

\* Only cats who roar together

# Tiger

- \* India — largest no. of wild tigers
- \* silent hunters
- \* Cover prey before going elsewhere
- \* So litany

## International Big Cats Alliance (IBCA)?

- **Launched by** - Prime Minister Narendra Modi in 2023 at Mysuru, Karnataka, to commemorate 50 years of Project Tiger.
- **Aim** - To conserve 7 big cats namely Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar and Puma
- **Membership** - Open to 97 range countries, which contain the natural habitat of the big cats, as well as other interested nations, international

organisations, etc.

- **Features** – Assured support over 5 years with guaranteed funding of over Rs 800 crore
- Rehabilitation of the big cats
- Dissemination of information on benchmarked practices, capacity building, resources repository, research and development, and awareness creation

## PUMA

mountain lion—also known as the cougar, puma, panther, or catamount—is a large cat species native to the Americas. Mountain lions are large, tan cats. Their bodies are mainly covered in tawny-beige fur, except for the whitish-gray belly and chest

body size depending on geographic location—their size is smallest closer to the equator and largest closer to the poles

\* Range – Americas in wide range of ecosystems

\* Can't roar

\* Solitary.

## Polar Bear



- \* Marine mammal
- \* Skin actually black —  
appears white b/c of  
light reflection
- \* Can swim for days

# PYQs SPECIES

## Species appeared in PYQs (2011-2023)

Species	IUCN status	Distribution	Specific location
Indian wild ass (2011, 2012, 2017)	Near threatened	Rann of Kutch (GJ, Raj)	Indian wild ass sanctuary (Kutch)
Indian wild buffalo (2011, 2017)	Endangered	India, Nepal, Bhutan, Thailand, Cambodia, Myanmar	Kaziranga, Manas, Dibru-saikhowa, Laokhowa wildlife sanctuary, d'ering memorial wildlife sanctuary, Balphakram NP, Indravati NP
Indian wild boar (2011)	Least concern	India, Myanmar, Thailand, Sri Lanka	Bandhavgarh NP
Indian gazelle (2011)	Least concern	Iran, Afghan, Pak, Ind	Bukkapatna chinkara WS (KN), Yadahalli chinkara WS (KN)
Great Indian Bustard (2012)	Critically endangered	Central and west Asia	Desert NP, Kutch bustard sanctuary, Karera wildlife sanctuary, Great indian bustard sanctuary, Rollapadu WS
Musk deer (2012, 2020)	Endangered	Mountainous region from Siberia to Himalayas	Askot WS, Gangotri NP, Kishanpur WS, Manas NP
Red Panda (2012)	Endangered	India, Nepal, Bhutan, Myanmar & South China	Singalila NP, Neora valley NP
Kashmir stag (Hangul) (2012)	Critically endangered	Kashmir, Himachal Pradesh	Dachigam WS, Overa-arun WS
Cheetal (2012)	Least concern	India, Nepal, Bangladesh, Bhutan, Sri Lanka	
Blue bull (Nilgai) (2012)	Least concern	India, Nepal, Pakistan, US	Gir, Satpura, Tadoba, Ranthambore

Snow leopard (2012)	Vulnerable	Mountainous region of central and south asia	Hemis NP
Swamp deer (Barasingha) (2012, 2013, 2020)	Vulnerable	Upper Assam, Yamuna plains, Indo-gangetic plain	Kanha NP, Kaziranga NP, Manas NP
Rhesus Monkey (2012)	Least concerned	Afghanistan, Pakistan, India, Southeast Asia, and China	
Saras (2012)	Vulnerable	Gangetic plains, Godavari plains, WB to Assam, Pakistan, Nepal	Keoladeo NP
Lion tailed macaque (2012, 2013, 2023)	Endangered	TN, Kerala, KN	Silent valley NP, Neyyar, peppara, shendurney WS
Hanuman langur (Gray langur) (2012)	Least concern	North India, Bhutan, Nepal	
Black necked crane (2012, 2014)	Near threatened	Tibetan plateau, China, Eastern ladakh, Arunachal	Sangti valley, Zemithang valley, Chug valley
Namdapha flying squirrel (2012)	Critically endangered	Namdapha tiger reserve	
Star tortoise (2013)	Vulnerable	Central and southern India, Pakistan, Sri Lanka	
Pygmy hog (2013)	Endangered	North east India	Manas NP
Monitor lizard (2013)	Near threatened	Afghanistan, Pakistan, India, Southeast Asia, and China	
Spider monkey (2013)	Critically endangered	Tropical forest of central and south America	
Sea cow (Dugong)	Vulnerable	Gulf of Mannar, Gulf of Kutch, Palk Bay,	India's first conservation reserve for the Dugong in

(Mammal) (2013, 2015)		and the Andaman and Nicobar Islands	Gulf of Mannar, Palk Bay
Sea Lion (Mammal) (2013)	Endangered	Subarctic to tropical waters of the global ocean	
Sea horse (Fish) (2013)	Vulnerable	Pacific waters from North America to South America	
Gharial (2013, 2017)	Critically endangered	Nepal, India (Tributaries of Ganga)	
Leatherback turtle (2013)	Critically endangered	It is found in all oceans except the Arctic and the Antarctic, Within the Indian Ocean, they nest only in Indonesia, Sri Lanka, and the Andaman and Nicobar Islands	
Common Myna (2014)	Least concern	Asia	
Painted stork (2014)	Near threatened	Asian plains	Keoladeo NP
Great indian hornbill (2016)	Vulnerable	Forests of India, Bhutan, Nepal, mainland Southeast Asia and Sumatra.	Western ghats
Asiatic lions (2017, 2019)	Endangered	India (Guj)	Gir NP, Barda WS
Blue finned mahseer (2019)	Least concern	Southern India	Krishna river basin, Cauvery basin
Rusty spotted cat (2019)	Near threatened	India (Moist, evergreen, dry deciduous forest), Nepal	Eastern ghats, Gir NP, Tadoba-Andhari TR
Irrawaddy dolphins (2019)	Endangered	South east Asia	Irrawaddy
Indian elephant (2020)	Endangered	India, Nepal, Bangladesh, Bhutan, Myanmar, Thailand, Malay Peninsula, Laos, China, Cambodia, and Vietnam	

Ceylon frogmouth (2020)	Least concern	Sri Lanka & Southwest India	Western ghats
Coppersmith Barbet (2020)	Least concern	India and Southeast Asia	Western ghats
Grey chinned minivet (2020)	Least concern	Northeast India, Southern China	
White throated redstart (2020)	Least concern	Northeast India, Nepal, Bhutan, central China	
Indian Hedgehog (2021)	Least concern	Northwest India, Pakistan	
Indian Pangolin (2021)	Endangered	India, Sri Lanka	Nilgiri Hills
Chinese Pangolin (2021)	Critically endangered	North India, South China, Southeast asia	
Marmot (2021)	Least concern	Europe, Asia and North America	
Oyster (2021)			Filter feeder
Pelican (bird) (2021)	Near threatened	All continents except Antarctica	
Catfish (2021)			
Octopus (2021)			
Ants (2022)			Cultivator of fungi
Malabar civet (2023)	Critically endangered	Endemic to western ghats	Nocturnal animals in Kerala & Karnataka
Sambar deer (2023)	Vulnerable	Throughout India	Nocturnal animals
Indian squirrels (2023)	Least concerned	India and Sri Lanka	South of Vindhyas
Orangutan (2023)	Critically endangered	Indonesia	Borneo and Sumatra

Sloth bear (2023)	Vulnerable	India, Nepal and Sri Lanka	Occurs in Shoolpaneshwar, Ratanmahal, Jessore, and Balaram Ambaji Sanctuaries.
Fishing Cat (2023)	Vulnerable	Discontinuously distributed in South and Southeast Asia.  Present in wetlands, swamps, marsh, mangrove forests, etc	Ranthambore National Park, Pilibhit, Dudhwa and Valmiki Tiger Reserves, Lothian Island Wildlife Sanctuary, Bhitarkanika Wildlife Sanctuary, Coringa Wildlife Sanctuary, Krishna Wildlife Sanctuary



# Environment Species 2011-2023 PYQs

## **Environment - List of All Species asked in PYQs**

### **Biodiversity Hotspot**

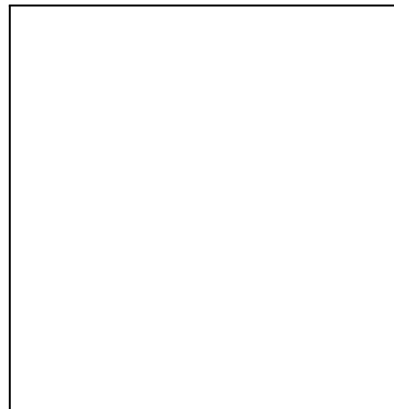
Biodiversity hotspots are biogeographic areas that contain large amounts of biodiversity as well as being under threat of destruction in the near future. This concept was introduced by **Norman Myers** in **1988**.

**The Himalayas, Western Ghats, Indo-Burma, and Sundaland** comprise the official 4 out of the **36 Biodiversity Hotspots** in the world.

<b>The Eastern Himalayas</b>	Bhutan, north-eastern India, and southern, central, and Eastern Nepal
<b>Indo-Burma</b>	North-eastern India, except Assam and Andaman group of Islands (and Myanmar, Thailand, Vietnam, Laos, Cambodia, and southern China).
<b>Western Ghats and Sri Lanka</b>	Entire Western Ghats (and Sri Lanka).
<b>Sundalands</b>	Nicobar group of Islands (and Indonesia, Malaysia, Singapore, Brunei, Philippines).

### **IUCN Red List**

In 1964, UNESCO established the International Union for Conservation of Nature. **It publishes the Red List of Threatened Species**, widely regarded as the most comprehensive source of information on the global conservation status of animal, plant, and fungi species.



Species	Images	PYQ Years	IUCN Status	Distribution and Characteristic
<b>Indian Wild Ass</b> (Khur)		2011, 2012, 2017	Near Threatened	<ul style="list-style-type: none"> <li>➤ Native to <b>South Asia</b> (India and western Pakistan including Jaisalmer, Bikaner, Sind and Baluchistan)</li> <li>➤ Largest population lies in the <b>Indian Wild Ass Sanctuary, Little Rann of Kutch(GJ)</b>.</li> <li>➤ Indian wild asses graze between dawn and dusk.</li> <li>➤ One of the <b>fastest</b> of Indian animals.</li> </ul>
<b>Indian Wild Buffalo</b>		2011, 2017	Endangered	<ul style="list-style-type: none"> <li>➤ Large bovine native to the <b>Indian subcontinent and Southeast Asia</b> (India, Nepal, Bhutan, Thailand, Cambodia, Myanmar)</li> <li>➤ In India - <b>Kaziranga, Manas, Dibru-saikhowa, Laokhowa wildlife sanctuary, D'ering Memorial Wildlife Sanctuary, Balphakram NP, Indravati NP.</b></li> <li>➤ <b>Habitat</b> - Wet grasslands, swamps, flood plains and densely vegetated river valleys</li> <li>➤ 15 wild water buffaloes were reintroduced into <b>Chitwan National Park in Nepal.</b></li> <li>➤ They are both <b>diurnal and nocturnal.</b></li> <li>➤ They are <b>seasonal breeders</b> (some populations breed year round).</li> </ul>
<b>Indian Wild Boar</b> (Andamanese or Moupin pig)		2011	Least concern	<ul style="list-style-type: none"> <li>➤ Native to India, Nepal, Myanmar, western Thailand, Bangladesh and Sri Lanka.</li> <li>➤ They have interacted with humans in the Indian Subcontinent since the Upper Paleolithic, (oldest depiction being a cave painting in Bhimbetka rock shelters).</li> <li>➤ In India - <b>Sariska Tiger Reserve, Bandhavgarh NP, Corbett NP and Ranthambore NP.</b></li> </ul>

<b>Indian Gazelle</b>  (Chinkara)		2011	Least concern	<p>➤ <b>Smallest Asiatic antelope species</b></p> <p>➤ <b>State animal of Rajasthan.</b></p> <p>➤ Native to India, Iran, Afghanistan And Pakistan.</p> <p>➤ <b>Habitat: Arid forests and deserts.</b> It is a <b>shy species</b> and avoids human habitation.</p> <p>➤ They can go without water for long periods + can get sufficient fluids from plants and dew droplets that get deposited on the plant surface in the night.</p> <p>➤ Although most are seen alone(sometimes spotted in groups of up to four)</p> <p>➤ In India - found in the <b>Thar Desert, Rann of Kutch, Kathiawar, and Saurashtra region.</b></p> <p>➤ <b>Bukkapatna chinkara WS (KN), Yadahalli chinkaraWS (KN)</b></p>
<b>Great Indian Bustard</b>		2012, 2020	Critically Endangered	<p>➤ One of the <b>heaviest-flying birds in the world (ostrich-like appearance)</b></p> <p>➤ <b>Largest</b> among the <b>four bustard species</b> (Houbara bustard, Lesser florican, Bengal florican &amp; Great Indian Bustard) found in India.</p> <p>➤ Flagship grassland species, representing the health of the grassland.</p> <p>➤ Primarily terrestrial birds (spend most of their time on the ground with occasional flights).</p> <p>➤ <b>Diurnal birds; Omnivores</b></p> <p>➤ <b>State bird of Rajasthan.</b></p> <p>➤ <b>Habitat:</b> Dry and semi-dry grasslands (associated in the same habitat as blackbuck.)</p> <p>➤ Native to the Indian subcontinent. In India Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, Karnataka.</p> <p>➤ <b>Desert NP, Kutch bustard sanctuary, Karera WLS, Great Indian Bustard sanctuary, Rollapadu WS</b></p>



Musk Deer		2012, 2020	Endangered	<p>➤ Can be seen in <b>Mountainous regions from Siberia to Himalayan states</b> such as Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh.</p> <p>➤ Inhabits high alpine environment;</p> <p>➤ During the day they are shy and secretive, At night, they emerge to feed in more open habitats.</p> <p>➤ <b>Askot WS, Gangotri NP.</b></p>
Red Panda		2012	Endangered	<p>➤ Native to the <b>eastern Himalayas and southwestern China</b> (inhabits Nepal, Sikkim, West Bengal and Arunachal Pradesh in India, Bhutan, southern Tibet, northern Myanmar and China's Sichuan and Yunnan provinces.)</p> <p>➤ It is not closely related to the giant panda, which is a bear (though both possess elongated wrist bones or "false thumbs" used for grasping bamboo)</p> <p>➤ <b>Habitat</b> - <b>coniferous</b> forests as well as <b>temperate</b> broadleaf and mixed forests (temperate climate zone of the Himalayas )</p> <p>➤ It is <b>solitary</b> and largely <b>arboreal</b> (typically rests or sleeps)</p> <p>➤ The red panda appears to be both <b>nocturnal</b> and <b>crepuscular</b>, sleeping in between periods of activity at night.</p> <p>➤ Largely <b>herbivorous</b> and feeds primarily on <b>bamboo</b> (also feeds on fruits, blossoms, acorns, eggs, birds and small mammals)</p> <p>➤ In India - <b>Singalila NP, Neora valley NP (WB)</b></p> <p>➤ <b>State animal of Sikkim.</b></p>

<b>Kashmir Stag (Hangul)</b>		<b>2012</b>	<b>Critically Endangered</b>	<p>➤ Subspecies of Central Asian red deer.</p> <p>➤ <b>Endemic to Kashmir</b> and is now <b>restricted to</b> the <b>Dachigam National Park</b>. Previously, it was found in the mountains of Kashmir and Himachal Pradesh's Chamba district.</p> <p>➤ Other Protected Areas - Rajparian Wildlife Sanctuary, Sind Valley, Forest covered areas of Kishtwar and Bhaderwah, and neighbouring areas of Aru.</p> <p>➤ <b>State animal of Jammu and Kashmir.</b></p> <p>➤ Only surviving Asiatic sub-species of the Red deer family.(elk)</p> <p>➤ <b>Habitat</b> - Inhabits mountainous areas; spends summers in alpine meadows and winters in valleys.</p> <p>➤ Kashmir stag is <b>matriarchal</b>.</p> <p>➤ <b>Project Hangul</b> was started in 1970 by the Kashmir government with the help of WWF.</p>
<b>Cheetal</b>		<b>2012</b>	<b>Least concern</b>	<p>➤ Also known as the <b>spotted deer</b>, native to the Indian subcontinent.</p> <p>➤ It is sexually <b>dimorphic</b>; males are larger than females, and antlers are present only on males.</p> <p>➤ India, Nepal, Bhutan, Bangladesh and Sri Lanka.</p> <p>➤ <b>State animal of Telangana.</b></p> <p>➤ <b>Habitat:</b> Subtropical grasslands and forests</p> <p>➤ Chitals are active throughout the day. They fall asleep a few hours before sunrise.</p> <p>➤ Chital forms <b>matriarchal</b> herds.</p> <p>➤ They are <b>social</b> animals. They commonly occur in herds of 10 to 50 individuals.</p> <p>➤ <b>Common mynas are often attracted to the chital.</b> An interesting relationship between herds of chital and troops of the northern plains grey langurs (Chital benefit from the langurs')</p>

				<p>eyesight and ability to post a lookout from trees, while the langur benefit from the chital's strong sense of smell, both of which help keep a check on potential danger)</p> <p>➤ Mainly feed on grasses (Chital in the Sunderbans may be omnivores).</p>
<p><b>Nilgai</b> (Blue bull)</p>		2012	<p><b>Least concern</b> <b>Schedule-III</b></p>	<p>➤ Largest Asian antelope (indigenous to the Indian subcontinent)</p> <p>➤ <b>Habitat:</b> lightly wooded forest, wooded grassland, scrub areas and agricultural areas and human settlements. Blue Bull usually avoids dense Forests.\</p> <p>➤ In India, the nilgai shares its habitat with the four-horned antelope, chinkara, chital and blackbuck;</p> <p>➤ It is a <b>diurnal</b> and <b>social</b> animal.</p> <p>➤ Sexual <b>dimorphism</b> is prominent.</p> <p>➤ Found in small herds of 4 to 20 (adult male is also seen alone wandering widely at old ages)</p> <p>➤ Found in Nepal, India and Pakistan.</p> <p>➤ The nilgai can survive for long periods without water and does not drink regularly even in summer.</p> <p>➤ Prefers herbs and grasses.</p> <p>➤ Major protected areas : Gir National Park (Gujarat); Bandhavgarh National Park, Kanha National Park, Pachmarhi Biosphere Reserve, Panna Tiger Reserve, Pench Tiger Reserve, Sanjay National Park, Satpura National Park (Madhya Pradesh); Tadoba Andhari Reserve (Maharashtra); Kumbhalgarh Wildlife Sanctuary, Sultanpur National Park in Gurgaon, Ranthambore National Park and Sariska Tiger Reserve (Rajasthan).</p>



<b>Snow Leopard</b>		<b>2012</b>	<b>Vulnerable</b>	<p>➤ Native to the mountain ranges of Central and South Asia.</p> <p>➤ Known as the '<b>ghost of the mountains</b>'.</p> <p>➤ In India - covers different parts of the Himalayas such as Ladakh, Himachal Pradesh, Uttarakhand, and Sikkim.</p> <p>➤ <b>Hemis National Park, Ladakh (Snow Leopard Capital of the world)</b></p> <p>➤ Snow leopards are <b>solitary</b> creatures and mostly active at dawn till early morning,</p> <p>➤ <b>Project Snow Leopard (PSL)</b>: It was launched in 2009.</p> <p>➤ <b>Kyrgyzstan</b> has officially declared the <b>Snow Leopard</b> as its <b>national symbol</b>.</p> <p>➤ <b>Global Snow Leopard and Ecosystem Protection (GSLEP) Programme</b> - 12 snow leopard range countries. The snow leopard countries namely, India, Nepal, Bhutan, China, Mongolia, Russia, Pakistan, Afghanistan, Kyrgyzstan, Kazakhstan, Tajikistan, and Uzbekistan.</p> <p>➤ Snow Leopard conservation breeding programme is undertaken at <b>Padmaja Naidu Himalayan Zoological Park, Darjeeling, West Bengal</b>.</p>
<b>Swamp Deer</b> (also called as barasingha)		<b>2012, 2013, 2020</b>	<b>Vulnerable</b>	<p>➤ Distributed in the Indian subcontinent - found in open forests and grasslands of India and Nepal); already extinct in Pakistan and Bangladesh</p> <p>➤ Differs from all other Indian deer species in that the antlers carry more than three tines.</p> <p>➤ <b>State animal of the Indian states of Madhya Pradesh and Uttar Pradesh.</b></p> <p>➤ Three subspecies of swamp deer - western swamp deer found in Nepal, southern swamp deer found in central and north India (Kanha National Park) and eastern swamp deer found in the Kaziranga and Dudhwa National Parks.</p> <p>➤ Largely feed on grasses and aquatic plants (They feed throughout the day)</p>

<b>Rhesus Monkey</b>		<b>2012</b>	<b>Least concern</b> <b>Schedule II</b>	<ul style="list-style-type: none"> <li>➤ Species of <b>Old World monkey</b>(Africa, Asia, Generally larger than new world monkey)</li> <li>➤ Natural range includes Afghanistan, Pakistan, India, Southeast Asia, and China</li> <li>➤ The law allows for it to be hunted by declaring it 'vermin' for a specific period if it poses a danger to human life or property.</li> <li>➤ The rhesus macaque is a <b>terrestrial, arboreal</b>, and <b>diurnal</b> mammal.</li> <li>➤ Primarily <b>herbivorous</b>, consuming predominantly fruit, but also seeds, roots, buds, bark, and cereals.</li> <li>➤ The social groups are <b>matrilineal</b>, whereby a female's rank is decided by the rank of her mother.</li> </ul>
<b>Saras</b>		<b>2012</b>	<b>Vulnerable</b> <b>Schedule IV</b>	<ul style="list-style-type: none"> <li>➤ <b>Tallest flying bird</b> in the world.</li> <li>➤ <b>State bird of Uttar Pradesh.</b></li> <li>➤ <b>Habitat</b> - known for its ability to live in association with humans, inhabiting open, cultivated, well watered plains, marshlands and jheel.</li> <li>➤ These birds nest on the ground. A bulky nest is formed from wetland vegetation. Countries: Australia, Cambodia, China, India, Laos, Myanmar, Nepal, Pakistan, VietNam, Bangladesh.</li> <li>➤ In the Indian subcontinent, it is found in northern and central India, Terai Nepal and Pakistan.</li> <li>➤ Sarus cranes are largely <b>nonmigratory</b>.</li> <li>➤ <b>Keoladeo National Park</b></li> <li>➤ Relocate from Amethi to Raebareli's Samaspur Bird Sanctuary.</li> </ul>

Lion Tailed Macaque		2012, 2013, 2023	Endangered Schedule I	<p>➤ Old World monkey.</p> <p>➤ Sometimes called <b>bearded monkeys</b>.</p> <p>➤ These are only <b>native to India</b>. (endemic to small and severely fragmented rainforests of the <b>Western Ghats</b> in Karnataka, Kerala and Tamil Nadu)</p> <p>➤ The lion-tailed macaque is diurnal and prefers the upper canopy of primary tropical evergreen rainforest ( arboreal living)</p> <p>➤ Unlike other macaques, lion-tails avoid humans as much as possible.</p> <p>➤ <b>Silent Valley National Park</b> in Kerala has the largest population of lion-tailed macaques in South India. (Others - Neyyar, peppara, shendurney WS)</p> <p>➤ Males define the boundaries of their home ranges by calls.</p> <p>➤ Their communication system contains as many as 17 vocalisations.</p> <p>➤ Lion-tailed macaques are <b>omnivores</b>.</p>
Hanuman Langur		2012	Least concern Schedule II	<p>➤ Also called <b>Bengal sacred langur/ northern plains gray langur</b> Is a colobine, meaning leaf-eating monkey.</p> <p>➤ In India, most langurs come under the genus Semnopithecus.</p> <p>➤ North India, Bhutan, Nepal.</p> <p>➤ <b>Habitat</b> - subtropical, tropical moist, temperate, alpine, coniferous and broadleaf forests.</p> <p>➤ The northern plains gray langur is <b>diurnal</b>, and is both <b>terrestrial</b> and <b>arboreal</b>.</p> <p>➤ Northern plains gray langur often associated with chital deer. Both species respond to each other's alarm calls.</p> <p>➤ <b>Kashmir gray langur - Endangered.</b></p>



<b>Black Necked Crane</b>		<b>2012, 2014</b>	<b>Near Threatened</b> <b>Schedule I</b>	<p>➤ <b>Habitat:</b> Found in India, China and Bhutan and breeds in high altitude wetlands in the Tibetan plateau.</p> <p>➤ Meadows are the favourite habitat of Black-necked cranes</p> <p>➤ The bird is revered by the <b>Monpa</b> Community (major Buddhist ethnic group of Arunachal Pradesh) as an <b>embodiment of the sixth Dalai Lama</b>.</p> <p>➤ In Bhutan and <b>Arunachal Pradesh</b>, it only comes <b>during the winters</b>.</p> <p>➤ Both the sexes of Black Necked Crane are almost of the same size, but the male is slightly bigger than the female.</p> <p>➤ <b>State bird of Ladakh.</b></p> <p>➤ Black-necked cranes are omnivorous.</p> <p>➤ Sangti valley, Zemithang valley, Chug valley.</p>
<b>Namdapha Flying Squirrel</b>		<b>2012</b>	<b>Critically Endangered</b> <b>Schedule II</b>	<p>➤ Namdapha flying squirrel first described in <b>1981</b>.</p> <p>➤ They are an <b>arboreal, nocturnal</b> flying squirrel endemic to Arunachal Pradesh.</p> <p>➤ These squirrels are not capable of flight like birds or bats; instead, they glide between trees.</p> <p>➤ The <b>Namdapha NP</b> is located between the Dapha bum range of the Mishmi Hills and the Patkai range.</p> <p>➤ Known habitat is tall <b>Mesua ferrea jungles</b>, often on hill slopes in the catchment area of <b>Dihing River</b> (particularly on the western slope of Patkai range)</p> <p>➤ They are herbivores (frugivores, granivores). They eat various fruits, nuts, seeds, and fungi.</p> <p>➤ It is <b>among the 25 "most wanted lost"</b> species that are the focus of Re:wild's "Search for Lost Species" initiative.</p>

Star Tortoise		2013	Vulnerable Schedule IV	<p>➤ Found across the Indian subcontinent (Central and Southern parts of India, in West Pakistan and in Sri Lanka)</p> <p>➤ <b>Habitat</b> - dry, open habitats such as scrub forests.</p> <p>➤ Star tortoises are <b>herbivores</b>.</p>
Pygmy Hog		2013	Endangered Schedule I	<p>➤ World's <b>rarest and smallest</b> wild pigs.</p> <p>➤ <b>Unique nesting behaviour</b> - build its own home, or nest, complete with a 'roof', using dry grasses and vegetation.</p> <p>➤ <b>Indicator species</b> - reflects the health of its primary habitat, the tall, wet grasslands of the region (commonly referred to as 'thatchland').</p> <p>➤ Found only in <b>Manas Wildlife Sanctuary, Assam</b>. Earlier, it was located across north India, Nepal, and Bhutan.</p> <p>➤ Pygmy hogs are <b>diurnal</b> and <b>omnivorous</b>.</p> <p>➤ Pygmy hogs are social animals that live in small family groups.</p> <p>➤ Pygmy hog-sucking Louse is a critically endangered parasite that feeds only on Pygmy Hogs.</p>
Monitor Lizard		2013	Near Threatened Schedule 1	<p>➤ <b>Most intelligent</b> of all lizards.</p> <p>➤ Native to Asia, Africa, and Australia.</p> <p>➤ India is home to four Monitor lizards – the Bengal Monitor, Asian Water monitor, Yellow monitor and Desert monitor.</p> <p>➤ <b>Terrestrial</b> and largely <b>carnivorous</b>.</p> <p>➤ They <b>do not blink</b> and they have very good vision.</p>

				<p>➤ They have forked tongues which they use for smelling.</p> <p>➤ Unlike snakes, monitor lizard venom glands are situated in their lower jaw.</p> <p><b>Komodo dragon</b> - largest and heaviest lizards on Earth; can eat almost anything, including invertebrates, birds, and mammals; thrived in the harsh climate of Indonesia's Lesser Sunda Islands.</p>
Spider Monkey		2013	Critically Endangered	<p>➤ One of the Largest New World Monkey.</p> <p>➤ Found in tropical forests of Central and South America, from southern Mexico to Brazil.</p> <p>➤ Primarily eat fruits, but will also occasionally consume leaves, flowers, and insects.</p> <p>➤ Strictly arboreal lifestyle.</p> <p>➤ Unlike many monkeys, they do not use their arms for balance when walking, instead relying on their tails.</p> <p>➤ Spider monkeys are diurnal.</p> <p>➤ Grooming is not as important to social interaction, owing perhaps to a lack of thumbs.</p> <p>➤ Avoid the upper canopy of the trees.</p>
Sea Cow (Dugong) Order - Sirenia		2013, 2015	Vulnerable Schedule I	<p>➤ It is the only herbivorous mammal that is strictly marine; inhabiting the shallow warm coastal waters of the Indian and Pacific oceans.</p> <p>➤ Very social species.</p> <p>➤ Largest population - northern waters of Australia; 2nd largest population - Arabian Gulf.</p> <p>➤ In India - Gulf of Manner, Gulf of Kutch, Palk Bay, and Andaman and Nicobar Islands.</p> <p>➤ They are not considered migratory but are known to travel great distances(in search of food)</p>



				<p>➤ <b>India's first conservation reserve for the Dugong in Gulf of Manner, Palk Bay.</b></p> <p>➤ Unlike dolphins and other cetaceans, sea cows have two nostrils and no dorsal fin.</p> <p>➤ <b>State animal of Andaman &amp; Nicobar Islands.</b></p>
<b>Manatees</b>			<b>Vulnerable</b>	<p>➤ <b>Large aquatic mammals</b>; belong to a group of animals called Sirenia. This group also contains dugongs.</p> <p>➤ Herbivores; solitary animals; In order to breathe, they must swim to the water's surface for air.</p> <p>➤ Dugongs and manatees are very similar in appearance and behaviour, but there is one key difference:-Manatees have paddle-shaped tails, and dugongs have fluked tails, giving it a whale-like appearance.</p>
<b>Sea Lion</b> (pinnipeds)		<b>2013</b>	<b>Endangered</b>	<p>➤ Semi-aquatic mammal; inhabit rocky shorelines, islands, and sandy beaches.</p> <p>➤ Pacific Ocean, the Atlantic Ocean, and parts of the Indian Ocean.</p> <p>➤ Sea lions are <b>carnivorous</b>.</p> <p>➤ Red Tide (Algal Bloom) is a threat to them. Red tide is the red colouration of seawater due to the presence of dinoflagellate Gonyaulax.</p> <p>➤ Sea lions are related to walruses and seals (pinnipeds)</p>
<b>Sea Horse</b> (marine fish)		<b>2013</b>	<b>Vulnerable</b>	<p>➤ Found in shallow tropical and temperate waters throughout the world.</p> <p>➤ 46 species of seahorses reported worldwide - nine species are distributed along the coasts of eight States and five Union Territories from Gujarat to Odisha, apart from Lakshadweep and the Andaman and Nicobar Islands.</p>

Gharial		2013, 2017	Critically Endangered	<p>➤ <b>Fresh-water crocodile</b> which lives in deep fast-flowing rivers.</p> <p>➤ Compared to alligators and crocodiles, a Gharial has a very long and narrow snout.</p> <p>➤ Gharial is found only in India and Nepal.</p> <p>➤ Occur in three tributaries of the Ganga River: the <b>Chambal and the Girwa Rivers</b> in India and the <b>Rapti-Narayani River in Nepal</b>.</p> <p>➤ Gharial reserves - UP, MP, RJ</p> <p>➤ Conservation - Breeding Centres of <b>Kukrail Gharial Rehabilitation Centre in Lucknow, Uttar Pradesh, National Chambal Sanctuary</b> (Gharial Eco Park, Madhya Pradesh).</p> <p>➤ India has three species of Crocodilians namely:</p> <ul style="list-style-type: none"> <li>• <b>Gharial</b>: Critically Endangered</li> <li>• <b>Mugger crocodile</b>: Vulnerable; native to freshwater and inhabits marshes, lakes, rivers and artificial ponds; found all over south Asia</li> <li>• <b>Saltwater crocodile</b>: Least Concern; called the 'estuarine crocodile' ; found in three locations in India — the Sundarbans, Bhitarkanika National Park and the Andaman and Nicobar Islands ( also found in Bangladesh, Malaysia, Indonesia, Brunei, the Philippines, Papua New Guinea, Australia and the Solomon Islands)</li> </ul> <p>➤ Population of Gharials is a <b>good indicator of clean river water</b>.</p> <p>➤ Gharials are bigger than freshwater crocodiles but smaller than saltwater crocs.</p>
Leatherback Turtle		2013	Vulnerable	<p>➤ <b>Largest turtle in the world</b>; highly migratory.</p> <p>➤ Other species are: Olive Ridley turtle, Green turtle, Hawksbill turtle, Loggerhead turtle, Leatherback turtle. Except the Loggerhead, the remaining four species nest along the Indian coast.</p> <p>➤ Only species of sea turtle that lack scales and a hard shell.</p> <p>➤ Unique thermoregulatory adaptation allows them to maintain core body temperatures at</p>

				<p>extremely cold depths.</p> <p>➤ They are <b>found in all oceans except the Arctic and the Antarctic</b>, Within the Indian Ocean, they nest only in Indonesia, Sri Lanka, and the Andaman and Nicobar Islands</p> <ul style="list-style-type: none"> <li>• <b>Olive Ridley – Vulnerable</b></li> <li>• <b>Green turtle – Endangered</b></li> <li>• <b>Loggerhead – Vulnerable</b></li> <li>• <b>Hawksbill – Critically Endangered</b></li> <li>• <b>Leatherback – Vulnerable</b></li> </ul>
<b>Painted Stork</b>		<b>2014</b>	<b>Near Threatened</b>	<p>➤ Fish-eating bird.</p> <p>➤ They are not migratory and only make short-distance movements</p> <p>➤ <b>Endemic to the Indian subcontinent and Southeast Asia.</b></p> <p>➤ Habitat: freshwater marshes, lakes, flooded fields, irrigation canals, rivers, etc.; They are absent from very dry or desert regions, dense forests and the higher hill regions .</p> <p>➤ <b>Atapaka Bird Sanctuary at Kolleru Lake</b> has become a safe breeding ground</p> <p>➤ Keoladeo National Park.</p>
<b>Great Indian Hornbill</b>		<b>2016</b>	<b>Vulnerable</b>  <b>Schedule I</b>	<p>➤ Found in tropical and subtropical Africa, Asia and Melanesia. <b>In India, they are found in the Western Ghats and the northeastern states.</b></p> <p>➤ <b>Habitat</b>– Great hornbills inhabit the canopy of tall evergreen forests.</p> <p>➤ It is predominantly frugivorous (but can also prey on small mammals, reptiles and birds)</p> <p>➤ <b>State bird of Kerala and Arunachal Pradesh.</b> But it is not a state bird of Nagaland although Hornbill Festival is celebrated in Nagaland (Often cited as “festival of all festivals”)</p> <p>➤ <b>Logo of Bombay Natural History Society (BNHS) is Great hornbill.</b></p> <p>➤ India - home to 9 species of Hornbill. All species except the Oriental pied hornbill are listed under Schedule I of the Wildlife Protection Act (1972)</p>



				<p>➤ <b>Narcondam Hornbill (Vulnerable)</b> is found only in the Narcondam Island of Andaman Sea.</p>
<p><b>Asiatic Lion</b> (Panthera Leo)</p>		2017, 2019	Endangered	<p>➤ <b>Habitat:</b> presently found only in and around the Gir Forest in the Saurashtra peninsula of Gujarat in western India.</p> <p>➤ Inhabit tropical and subtropical dry broadleaf forests, thorny forest and savanna.</p> <p>➤ Asiatic lions are slightly smaller than African lions. + longitudinal fold of skin running along its belly in Asiatic Lion.</p> <p>➤ Gujarat government has planned to translocate 40 adult and sub-adult lions to the <b>Barda Wildlife Sanctuary (GJ)</b> (Kuno NP Translocation - No Progress)</p>
<p><b>Blue Finned Mahseer &amp; Golden Mahseer</b></p>		2019	Least concern	<p>➤ Found in India and in other range countries in South Asia.</p> <p>➤ Also known as Deccan Mahseer or Tor Khudree.</p> <p>➤ <b>Freshwater Ecosystem Indicator</b> (very sensitive to dissolved oxygen levels, water temperature and sudden climatic changes)</p> <p>➤ Blue Finned Mahseer is found in the Mula-Mutha River close to the Indian city of Pune, a part of the Krishna River basin.</p> <p>➤ The species is migratory and moves upstream during rains.</p>
<p><b>Rusty Spotted Cat</b></p>		2019	Near Threatened	<p>➤ This Cat is endemic to India and Sri Lanka, and has been reported mainly in the <b>Western Ghats</b>.</p> <p>➤ <b>Smallest wild cat</b> in Asia.</p> <p>➤ It occurs mainly in moist and dry deciduous forests as well as scrub and grassland, but is likely absent in evergreen forest.</p> <p>➤ Eastern ghats, Gir NP, Tadoba-Andhari TR.</p>

<b>Irrawaddy Dolphin</b>		<b>2019</b>	<b>Endangered</b>	<p>➤ Living in <b>brackish water</b> near coasts, river mouths and in estuaries in South and Southeast Asia, and in three rivers: the Ayeyarwady (Myanmar), the Mahakam (Indonesian Borneo) and the Mekong.</p> <p>➤ In India, Irrawaddy dolphins are mostly found in <b>Chilika Lake</b>.</p> <p>➤ They are known for their unique behaviour, such as “<b>spy-hopping</b>,” where they rise vertically out of the water to observe their surroundings.</p>
<b>Gangetic Dolphin</b>			<b>Endangered</b>	<p>➤ Ganges river dolphin can <b>only live in freshwater</b> and is essentially <b>blind</b>.</p> <p>➤ One of the 4 freshwater dolphin species in the world (<b>Other</b> - baiji, now likely extinct from the Yangtze River in China, the bhulan (Indus in Pakistan) and the boto (Amazon River)</p> <p>➤ <b>India's National Aquatic Animal</b>.</p> <p>➤ Inhabits the <b>Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu river systems</b> of Nepal, India, and Bangladesh.</p> <p>➤ Long thin snout; frequently found alone or in small groups.</p> <p>➤ Feeds majorly on fishes and is usually found in counter-current systems of the main river channel.</p> <p>➤ Hunt by emitting ultrasonic sounds.</p> <p>➤ Being a mammal, the Ganges River dolphin cannot breathe in the water and must surface every 30-120 seconds. Because of the sound it produces when breathing, the animal is popularly referred to as the 'Susu'.</p>

Indus River Dolphin			Endangered	<p>➤ <b>State aquatic animal of Punjab.</b></p> <p>➤ Freshwater dolphin, found in the lower parts of the Indus River in Pakistan and in River Beas, a tributary of the Indus River in Punjab, India.</p>
Indian Elephant		2020	Endangered	<p>➤ It inhabits grasslands, dry deciduous, moist deciduous, evergreen and semi-evergreen forests in <b>13 range countries</b> spanning South and Southeast Asia - India, Nepal, Bangladesh, Bhutan, Myanmar, Thailand, Malay Peninsula, Laos, China, Cambodia, and Vietnam.</p> <p>➤ <b>Project Elephant</b> was launched in 1992 by the Government of India,</p> <p>➤ They are <b>mega herbivores</b>; An elephant communicates using low-pitched sounds and infrasonic grunts.</p> <p>➤ <b>Karnataka</b> has the <b>highest</b> elephant population in India followed by Assam and Kerala.</p> <p>➤ The Asian elephant is the largest land mammal on the Asian continent.</p> <p>➤ Only Asian elephant males have tusks while females have rudimentary tusks called tushes. Both male and female African elephants have tusks.</p>
Ceylon Frogmouth		2020	Least Concern	<p>➤ The bird habitat in Sri Lanka; also found in Karnataka, Goa, and Maharashtra. (Western ghats)</p> <p>➤ They are <b>nocturnal</b>.</p>



<b>Coppersmith Barbet</b>		<b>2020</b>	<b>Least Concern</b>	<p>➤ Also known as Crimson-breasted barbet is bird species found in the whole Indian Subcontinent and parts of Southeast Asia.</p>
<b>Grey Chinned Minivet</b>		<b>2020</b>	<b>Least Concern</b>	<p>➤ Found from the Himalayas to China, Taiwan and Southeast Asia.</p> <p>➤ Lives in the canopy of broadleaf forest and also coniferous forest.</p>
<b>White Throated Redstart</b>		<b>2020</b>	<b>Least Concern</b>	<p>➤ Found in India, Nepal, Bhutan, and China.</p> <p>➤ Its natural habitat is temperate forests.</p>
<b>Indian Hedgehog</b>  (insectivorous spiny mammal)		<b>2021</b>	<b>Least Concern</b>	<p>➤ There are seventeen species of hedgehog found throughout parts of Europe, Asia, and Africa, and New Zealand. However, there are <b>no hedgehogs native to Australia and America</b>.</p> <p>➤ Out of 17, India is home to 3.</p> <p>➤ Native to northern India and Pakistan.</p> <p>➤ Very fast runners; mainly lives in sandy desert.</p>

				<p>➤ They are <b>nocturnal</b> mammals; usually go into their burrows(hole or tunnel) and sleep continuously for two months to reduce their metabolic activity.</p>
<p><b>Indian Pangolin &amp; Chinese Pangolin</b></p>		2021	<p><b>Indian - Endangered (Schedule I)</b></p> <p><b>Chinese - Critically Endangered</b></p>	<p>➤ Pangolins are <b>nocturnal, toothless</b> mammals that dig burrows and feed on ants and termites.</p> <p>➤ They are <b>one of the most trafficked mammals</b> in the world.</p> <p>➤ They have scales made of keratin that cover their entire body.</p> <p>➤ When threatened, they can roll into a ball to protect themselves.</p> <p>➤ <b>Habitat:</b> well adapted to desert regions and prefer barren, hilly areas. Overall, they prefer soil that is soft and semi-sandy, suitable for digging burrows.</p> <p>➤ Out of the eight species of pangolin, the Indian Pangolin and the Chinese Pangolin are found in India.</p> <p>➤ <b>Indian Pangolin</b> - Bangladesh, India, Nepal, Pakistan and Sri Lanka.</p> <p>➤ <b>Chinese Pangolin</b> - Critically Endangered; Bangladesh; Bhutan; China; Hong Kong; India; Laos; Myanmar; Nepal; Taiwan, China; Thailand; Vietnam.</p>
<b>Marmot</b>		2021	<b>Least Concern</b>	<p>➤ Marmots are <b>relatively large ground squirrels</b> with 15 species living in Asia, Europe, and North America. They are the <b>heaviest members</b> of the squirrel family.</p> <p>➤ These <b>herbivores</b> are active during the summer.</p> <p>➤ Marmots typically live in burrows.</p>

Spot-billed Pelican			Near Threatened Schedule IV	<p>➤ The <b>Atapaka Bird Sanctuary</b>, part of the Kolleru Lake, has been identified as the world's largest home for the spot-billed pelican.</p> <p>➤ Large water bird found in the Indian subcontinent and SE Asia.</p> <p>➤ The main habitat is in shallow lowland freshwaters.</p> <p>➤ Spot-billed pelicans are carnivorous and eat a diet of mainly fish.</p>
Octopus			Least Concern	<p>➤ Octopuses are a <b>highly intelligent</b> marine species; They are carnivores.</p> <p>➤ An octopus has <b>3 hearts</b>; Octopuses have <b>9 brains</b> because, in addition to the central brain, each of 8 arms has a mini-brain.</p> <p>➤ Octopus has <b>blue blood</b>.</p> <p>➤ <b>Dumbo Octopus</b> - deepest living of all octopus species.</p>
Malabar Civet		2023	Critically Endangered	<p>➤ Malabar Civet is a <b>nocturnal</b> and elusive animal. It is <b>endemic to Western Ghats</b> of India. (Kerala, Karnataka)</p>
Sambar Deer		2023	Vulnerable Schedule-III	<p>➤ Large deer native to the Indian subcontinent, South China and Southeast Asia.</p> <p>➤ It inhabits tropical dry forests, tropical seasonal forests, subtropical mixed forests with stands of conifers. The sambar prefers the dense cover of deciduous shrubs and grasses.</p> <p>➤ Sambar are <b>nocturnal</b> or crepuscular.</p> <p>➤ They more commonly communicate by scent marking and foot stamping.</p>

				<p>➤ <b>State animal of Odisha.</b></p>
<p><b>Orangutan</b></p> <p>(orangutan means "man of the forest")</p>		2023	<p><b>Bornean orangutan - Endangered</b></p> <p><b>Sumatran - Critically Endangered</b></p>	<p>➤ Orangutans are <b>great apes native to the rainforests of Indonesia and Malaysia</b>. They are now <b>found only in parts of Borneo and Sumatra</b>.</p> <p>➤ Bornean and Sumatran orangutans differ a little in appearance and behaviour. While both have shaggy reddish fur, Sumatran orangutans have longer facial hair.</p> <p>➤ <b>Tapanuli orangutan is the most endangered of the great apes.</b></p> <p>➤ Exclusively arboreal - live among the trees of tropical rainforests.</p>
<p><b>Sloth Bear</b></p> <p>(Also called Honey Bear)</p>		2023	<b>Vulnerable</b>	<p>➤ Live in dry and moist forests and in some tall grasslands.</p> <p>➤ <b>Nocturnal, solitary</b> mammal that is native to the Indian subcontinent.</p> <p>➤ <b>Food Habits:</b> Eat termites and ants, fond of honey. (use their claws to excavate termites and ants)</p> <p>➤ Sloth bears <b>do not hibernate</b>.</p> <p>➤ <b>Daroji Sloth Bear Sanctuary</b> in Karnataka, Ballari district, is <b>Asia's first sloth bear sanctuary</b>.</p>
<b>Fishing Cat</b>		2023	<b>Endangered</b>	<p>➤ They are found in South and Southeast Asia.</p> <p>➤ <b>In India</b> - Foothills of the Himalayas along the Ganga and Brahmaputra river valleys and in the Western Ghats, Eastern Ghats, Chilika lagoon.</p> <p>➤ The fishing cat is an <b>elusive nocturnal</b> mammal.</p> <p>➤ <b>State Animal of West Bengal.</b></p>



# Marsupials

# mammals

Marsupials are a group of mammals that are known for giving birth to relatively undeveloped young, which then continue to grow and develop outside the womb, typically in a pouch. Some of the well-known examples of marsupials are:

- Kangaroos – Kangaroos are herbivorous mammals and inhabit a variety of habitats ranging from forests to grasslands. They are native to Australia.
- Koalas – Koalas are herbivorous mammals feeding almost exclusively on eucalyptus leaves. They are native to Australia.
- Opossums – Opossums are herbivorous mammals who are known for their distinctive long, hairless tails and their ability to play dead when threatened, which is known as "playing possum". They are found primarily in America.

Young ones – Joey



- **Tasmanian Tiger** – The Tasmanian tiger, also known as the Tasmanian wolf, was a carnivorous marsupial that is believed to be extinct.
- This animal vanished from the Australian mainland over 2000 years ago, largely due to excessive hunting, diseases, and competition from the dingo, a wild canine native to Australia.
- The **Tasmanian tiger** looked similar to a dog, with dark stripes extending from its back to its stiff tail and abdominal pouch.

## Characters

- \* Vivipary – Birth not egg
- \* Lack Placenta

# Diverse habitat — Forest to deserts

- **Marsupials** have a distinctive dentition.

For example, many species possess sharp, chisel-like incisors for gnawing and cutting vegetation.

Many marsupials are nocturnal, meaning they are most active during the night.

- Marsupials use scent marking as a form of communication. Scent glands are located in various parts of their bodies, such as the face or tail, which allows them to mark territory or communicate with potential mates.
- Some marsupials display complex social behaviors. For example, Tasmanian Devils can form groups called mobs, where individuals interact through vocalizations and facial expressions.

Distribun

Australia  
America

New guinea — Tree  
kangaroos