# I. Terrestrial Animals

| Species      | Context                                 | Characteristics                            | Habitat   | Conservation<br>Status   |
|--------------|---|--|---|--|
| Grey Wolf    | 'Operation<br>Bhediya' (UP)             | Social,<br>high-speed,<br>monogamous       | India: Peninsular; Himalayan: Trans-Himalaya        | Indian: WPA I;<br>Himalayan: VU,<br>CITES I, WPA I                     |
| Red Panda    | WAZA Award<br>Nominee                   | Arboreal,<br>nocturnal,<br>crepuscular     | India (NE),<br>Nepal, Bhutan,<br>Myanmar,<br>China  | EN, CITES I,<br>WPA I, Species<br>Recovery<br>Program                  |
| Asiatic Lion | Migration to<br>Barda WLS               | Smaller than<br>African,<br>moderate mane  | Gir (Gujarat)                                       | EN, CITES I,<br>WPA I, Species<br>Recovery<br>Program;<br>Project Lion |
| Cheetah      | Translocation to<br>Gandhi Sagar<br>WLS | Fastest<br>mammal,<br>doesn't roar         | African:<br>Sub-Saharan<br>Africa; Asiatic:<br>Iran | Asiatic: WPA I;<br>African: VU,<br>CITES I; Project<br>Cheetah         |
| Indian Tiger | -                                       | Flagship,<br>umbrella<br>species, solitary | India: Various<br>regions                           | CITES I, WPA I;<br>Project Tiger,<br>NTCA                              |

| Indian<br>Elephant     | -  | Intelligent, long<br>gestation,<br>female-led     | India: Central,<br>South, North<br>East                          | EN, CITES I,<br>WPA I; Project<br>Elephant   |
|------------------------|--|---|--|--|
| Nilgiri Tahr           | Population<br>survey (TN)                | Mountain<br>ungulate,<br>endemic to WG            | Western Ghats  | EN, WPA I;<br>State animal of<br>TN  |
| Hoolock<br>Gibbon      | Oil exploration<br>in Assam<br>sanctuary | Arboreal, diurnal, territorial, sexual dimorphism | NE India   | Western: EN,<br>CITES I, WPA I;<br>Eastern: VU,<br>CITES I, WPA I                            |
| Pangolin               | Increased poaching (Telangana)           | Scaly, eats<br>ants/termites,<br>nocturnal        | India: Throughout (except NE); Chinese: Assam, Eastern Himalayas | Both: WPA I,<br>CITES I  |
| Markhor                | Sighting in<br>Kashmir                   | Largest wild<br>goat                              | J&K (India), Pak,<br>Afg, Central<br>Asia                        | WPA I, CITES I;<br>Int'l Day of the<br>Markhor,<br>Kashmir<br>Markhor<br>Recovery<br>Project |
| Indian Bison<br>(Gaur) | Study in<br>Palamu TR                    | Massive,<br>grazing, diurnal                      | Western Ghats  | VU, WPA I,<br>CITES I  |

| Fishing Cat       | Collaring<br>project (Coringa<br>WLS) | Wetland feline,<br>nocturnal<br>hunter                 | India:<br>Sundarbans,<br>Himalayan<br>foothills, WG | VU, WPA I    |  |
|-------------------|---------------------------------------|--|---|--------------|--|
| lberian Lynx      | Conservation success                  | Solitary,<br>nocturnal/crepu<br>scular, rabbit<br>diet | Iberian<br>Peninsula                                | VU NER       |  |
| II. Avian Species |                                       |  |   |              |  |
| Species           | Contoxt                               | Characteristics  | Habitat   | Conservation |  |

### II. **Avian Species**

| Species                       | Context   | Characteristics  | Habitat  | Conservation<br>Status                                |
|-------------------------------|---|--|--|---|
| Indian Vulture                | Largest nesting<br>colony in Moyar<br>Valley          | Whitish<br>feathers on<br>dark head/neck,<br>colonial nester | Open<br>Grassland<br>(Jharkhand, MP,<br>Rajasthan) | CR, WPA I   |
| Great Indian<br>Bustard (GIB) | Bustard<br>Recovery<br>Program<br>funding<br>approved | Agro-grassland<br>bird, males<br>have gular<br>pouch         | Indian Subcontinent (Rajasthan, Gujarat)           | CR, CITES I,<br>WPA I, Species<br>Recovery<br>Program |
| Lesser Florican               | -   | Smallest<br>bustard, Males<br>display in                     | Rajasthan,<br>Gujarat, MP,<br>Maharashtra,<br>AP   | CR, WPA I   |

|                           |                                   | breeding<br>season                                    |   |  |  |
|---------------------------|-----------------------------------|---|---|--|--|
| Jerdon's<br>Courser       | Rare sighting                     | Nocturnal,<br>ground-dwellin<br>g, cryptic<br>plumage | Endemic to<br>Andhra<br>Pradesh   | CR, WPA I,<br>Species<br>Recovery<br>Program |  |
| Greater<br>Adjutant Stork | Purnima Devi<br>Barman's<br>award | Large flying<br>bird, scavenger                       | Assam, Bihar,<br>Cambodia;<br>wetlands  | EN, WPA I                                    |  |
| Amur Falcon               | Hunting ban in<br>Manipur         | Migratory<br>raptor, long sea<br>crossing             | Breeds in Russia/China, migrates to S. Africa; Manipur, Nagaland during migration | LC   |  |
| III. Aquatic Species      |                                   |   |   |  |  |
| Species                   | Context                           | Characteristics                                       | Habitat   | Conservation                                 |  |

| Species        | Context                               | Characteristics         | Habitat                                      | Conservation<br>Status |
|----------------|---------------------------------------|-------------------------|--|------------------------|
| Eurasian Otter | Radio-tagged in<br>Satpura TR<br>(MP) | Aquatic,<br>webbed feet | Europe, Asia,<br>Africa; India (N,<br>NE, S) | NT, CITES I,<br>WPA II |

| Vaquita                   | Population<br>decline          | Smallest<br>cetacean,<br>toothed whale | Gulf of<br>California<br>(Mexico)  | CR, CITES I  |
|---------------------------|--------------------------------|--|--|--|
| Blue Whales               | Comeback near<br>Seychelles    | Largest, loudest<br>animal, krill diet | All oceans<br>(except Arctic)  | EN, CITES I,<br>WPA I  |
| Gangetic River<br>Dolphin | Dolphin<br>tagging in<br>Assam | Blind, relies on echolocation          | Freshwater: Ganges-Brahm aputra-Meghna, Karnaphuli-San gu (India, Nepal, Bangladesh) | EN, WPA I;<br>National<br>Aquatic Animal,<br>Project Dolphin |

# IV.

| IV. Reptiles, Insects and Amphibians. |               |                  |                |              |
|---------------------------------------|---------------|------------------|----------------|--------------|
| Species                               | Context       | Characteristics  | Habitat        | Conservation |
|                                       | 2             |                  |                | Status       |
|                                       | Nall.         |                  |                |              |
| Neptis Philyra                        | New discovery | Butterfly, also  | Tale Valley    | -            |
| C,C                                   | in India      | known as         | WLS            |              |
| 10                                    |               | long-streak      | (Arunachal     |              |
| 83                                    |               | sailor, serrated | Pradesh); East |              |
| •                                     |               | wings            | Asia           |              |
|                                       |               |                  |                |              |
| Butterfly                             | New species   | Colorful wings   | Meghalaya;     | -            |
| Cicada                                | discovered    |                  | Southeast Asia |              |
|                                       |               |                  |                |              |

| Bumblebees                 | Resilient to pesticides                     | Fuzzy, short wings, larger than honeybees, buzz pollination, dance communication                   | -   | -                     |
|----------------------------|---|--|---|-----------------------|
| Gharial                    | -   | Bulbous knob<br>on snout,<br>primarily eats<br>fish  | Freshwater<br>rivers<br>(Chambal,<br>Girwa, Ghagra,<br>Son, Gandak) | CR, CITES I,<br>WPA I |
| Sea Anemone                | Bleaching in<br>Lakshadweep                 | Predatory,<br>symbiotic with<br>algae and<br>clownfish   | Coastal tropical<br>waters  | -                     |
| Batillipes<br>Chandrayaani | New marine<br>tardigrade<br>species         | Trapezoid-shap<br>ed head, 4 pairs<br>of legs with<br>spines, can<br>survive extreme<br>conditions | Southeast coast<br>of Tamil Nadu                                    | -                     |
| Sea Cucumbers              | Repopulation<br>aids coral reef<br>recovery | Echinoderm,<br>consumes<br>decomposing<br>matter, buffers<br>ocean<br>acidification                | Tropical seas   | WPA I                 |

| Sperm Whales            | Communicate<br>using "codas" | Largest toothed<br>whales, males<br>near poles       | Deep open<br>waters                             | EN             |
|-------------------------|------------------------------|--|---|----------------|
| Olive Ridley<br>Turtle  | Increased<br>deaths          | Olive green,<br>mass nesting<br>("Arribada")         | Tropical Pacific,<br>Indian, Atlantic<br>Oceans | VU, CITES I    |
| Indian Star<br>Tortoise | Threatened by illegal trade  | Solitary,<br>herbivorous,<br>star-patterned<br>shell | Arid regions of<br>India and Sri<br>Lanka       | WPA I, CITES I |

## V. **Plant Species**

|                |                      |                                 | 70.                  |   |
|----------------|----------------------|---------------------------------|----------------------|---|
| V. Plant Spec  | iies                 | ONAST                           | ERII                 |   |
| Species        | Context              | Characteristics                 | Habitat              | Uses/Significan                                 |
|                | wall S.              |                                 |                      | ce  |
| Utricularia    | Found in             | Carnivorous,                    | Lakes, streams,      | Boosts  |
| (Bladderworts) | Keoladeo NP          | has bladders to<br>trap prey    | waterlogged<br>soils | biodiversity,<br>controls insect<br>populations |
| Seaweed        | ICAR-CMFRI           | Marine                          | Oceans, rivers,      | Nutritional,                                    |
|                | center of excellence | plants/algae,<br>multicellular, | lakes                | medicinal,<br>manufacturing,                    |
|                | excellence           | autotrophs                      |                      | agricultural                                    |
|                |                      |                                 |                      | uses  |
|                |                      |                                 |                      |   |

|  |                                       | (green, brown, red)                                   |   |  |
|--|---------------------------------------|---|---|--|
| Aquilaria<br>Malaccensis<br>(Agarwood) | CITES eases<br>export from<br>India   | Evergreen tree,<br>aromatic oil and<br>chips          | NE India,<br>Bangladesh,<br>Bhutan, SE Asia                 | Aromatic<br>products   |
| Syntrichia<br>Caninervis               | Withstands<br>Mars-like<br>conditions | Desert moss   | Harsh locations<br>(Antarctica,<br>Mojave Desert)           | Possible<br>pioneer species<br>for Mars<br>colonization          |
| Semal Trees<br>(Silk Cotton<br>Tree)   | Disappearing<br>from S.<br>Rajasthan  | Large<br>deciduous tree,<br>crimson red<br>flowers    | RIMO  | Ayurvedic<br>medicine,<br>worshiped,<br>edible oil from<br>seeds |
| Tmesipteris<br>Oblanceolata            | Largest<br>genome                     | Fork fern, large<br>genome                            | New Caledonia,<br>nearby Pacific<br>islands;<br>rainforests | -  |
| Palm Tree                              | Planted to<br>combat<br>lightning     | Tropical, various types (coconut, oil palm, arecanut) | Tropical Forest<br>Ecosystems                               | Lightning<br>protection,<br>construction<br>materials, food      |
| Neelakurinji                           | Listed as<br>Vulnerable               | Shrub, blooms<br>every 12 years,<br>semelparous       | Shola<br>grasslands of<br>Western and<br>Eastern Ghats      | Name origin of<br>Nilgiri hills                                  |

| Water Spinach             | IIVR technology<br>for farmers         | Semi-aquatic,<br>perennial                                  | Tropics and subtropics           | Nutritional,<br>purifies water             |
|---------------------------|--|---|----------------------------------|--|
| Ashwagandha               | Growing in popularity                  | Evergreen<br>shrub, bioactive<br>compounds                  | India, Africa,<br>Middle East    | Medicinal<br>(Ayurvedic)                   |
| Kashmir<br>Chinars        | Digital<br>protection<br>(geo-tagging) | Large,<br>deciduous,<br>long-lived,<br>colorful leaves      | Kashmir,<br>Eastern<br>Himalayas | Medicinal,<br>furniture, dyes              |
| Tropical Plant<br>Subabul | Therapeutic potential identified       | Leguminous<br>tree,<br>fast-growing                         | Tropical and subtropical regions | Nutritional<br>(leaves and<br>seeds)       |
| Dicliptera<br>Polymorpha  | New species discovered                 | Thrives in grasslands, dual-blooming, spicate inflorescence | Western Ghats                    | -  |
| Sea Buckthorn             | GI Tagged                              | Grown<br>organically  | Ladakh                           | Medicinal,<br>nutritional<br>supplement    |
| Water<br>Hyacinth         | Used for<br>eco-friendly<br>products   | Non-native,<br>aquatic invasive<br>plant                    | Widespread in<br>India           | Reduces water pollution, used for products |

# VI. Animals at Vantara

| Species            | Characteristics   | Habitat  | Conservation<br>Status |
|--------------------|---|--|------------------------|
| Okapi              | "Forest giraffe" or<br>"zebra giraffe",<br>solitary, diurnal  | Endemic to arid regions of northwest India, southern India, and Sri Lanka. | HSWER N                |
| African Lion       | Males have thick manes, females hunt in prides, larger and darker manes than Asiatic lions            | Savannas,<br>grasslands, open<br>woodlands in<br>sub-Saharan Africa        | VU, CITES I            |
| Rare Two-Headed    | Genetic mutation  | Savannas,  |                        |
| Turtle (Bicephalic | (polycephaly),  | grasslands, and  |                        |
| Chelonian)         | coordination  | open woodlands in  |                        |
| Ž,                 | challenges  | sub-Saharan Africa   |                        |
| Orangutan          | Reddish-brown,<br>intelligent, tool<br>users, solitary, 3<br>species (Bornean,<br>Sumatran, Tapanuli) | Tropical rainforests<br>of Borneo and<br>Sumatra                           | CR, WPA I, CITES I     |

| Lemurs | Primates, diverse | Madagascar,        | Many species in |
|--------|-------------------|--------------------|-----------------|
|        | species, social,  | Comoros Islands;   | CITES I         |
|        | female-dominated  | various ecosystems |                 |
|        | groups            |                    |                 |
|        |                   |                    |                 |
|        |                   |                    |                 |

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