

MUHAMMAD IMRAN**ZOO504 - Wildlife****Current paper solved question final term****February 2020****1. Native countries of eagle****2 marks****PPT 140**

Bangladesh, Nepal, Pakistan, Cambodia, India, Myanmar

2. Scientific name of wild goat**2 marks**

Capra aegagrus

3. Native of Indian vultures**2 marks****PPT 144**

Native: Pakistan and India

4. Indian spotted eagle description**2 marks****PPT 140**

A medium-sized eagle about 60 cm in length and has a wingspan of 150 cm with a short tail. Adults are essentially brown. The legs appear longer and thinner due to the tarsii being less thickly feathered. This species has a lighter coloration overall compared to its relatives with a darker iris that makes the eyes appear darker than the plumage. The young birds are giving a spotted appearance glossy brown. Tips of the head and neck feathers being creamy. The upper tail coverts are light brown with white giving a barred appearance. The median coverts have large creamy spots. After about eighteen months the bird moults and becomes a darker shade and has less spots.

5. Types of zoo**2 marks****PPT 98**

Based on area, Zoological garden can be categorized into four Zoos

- Large Zoo • Medium Zoo • Small Zoo • Mini Zoo

6. Scientific name of domestic goat**2 marks**

Capra aegagrus hircus

7. Scientific name of black buck**2 marks****PPT 177**

Antelope cervicapra

8. Threats of Indian vulture**2 marks****PPT 144**

These vultures were being found dead and dying in Pakistan and throughout India. The antiinflammatory drug diclofenac has been identified as the cause of mortality. Vultures are exposed to diclofenac and other NSAIDs through scavenging on the carcasses of largely cattle and buffalo that have been treated with the drugs prior to death and left for scavengers to consume. Hence likely contributory factors are

- Poisoning • Pesticide use • Conversion and disturbance of forested habitats within its range.

9. Name of marten Species**2 marks****PPT 186**

Stone marten (Martes foina)

Yellow throated marten (Martes flavigula)

10. Primary objective of zoo**2 marks****PPT 97**

Primary Objective:

“Conservation of Wildlife”

- No zoo shall take up any activity that is inconsistent with this objective.
- The objective shall be to complement and strengthen the national efforts in conservation of the rich biodiversity of the country, particularly the fauna.”

11. Name of threats of snow leopard**2 marks****PPT 113**

1. Poaching
2. Conflict with communities
3. Shrinking home:
4. Changing climate
5. Lack of effective law enforcement.

12. What is zoo status in today society**2 marks****PPT 96**

Zoos exist in today's society for a myriad of reasons including

- Conservation • Education • Science • Recreation

13. Leopard cat threat**3 marks****PPT 152**

Leopard cat skins are commercially traded internationally for the fur trade, primarily coats. Skins are also used as decorations in some parts of its range. They are occasionally kept as pets. Sometimes taken from the wild. Sometimes from captive breeding. They have been interbred with domestic cats, particularly in the West, to make the popular Bengal breed. Their bones are used in some traditional Asian medicines

14. What are conservation strategies for kingfisher**3 marks****PPT 201**

- Bern Convention Appendix II. • EU Birds Directive Annex I. • There are no known current conservation measures for this species within its European range.

15. Three role of zoo**3 marks****PPT 95**

- Housed within enclosures • Displayed to the public • They may also breed • "Today, the zoo is on the list of inevitable field trips and vacation destinations.

16. Biological behavior of saker falcon**PPT 132**

This bird is physically adapted to hunting close to the ground in open terrain, combining rapid acceleration with high manoeuvrability. Specialising on mid-sized diurnal terrestrial rodents (especially ground squirrels.

17. Sate of general guideline maintenance of a zoo**PPT 99**

- No zoo shall acquire any animal in violation of Wildlife Act. • No zoo shall exhibit any animal that is seriously sick or injured. • No zoo shall use any animal, other than the elephant in plains and yak in hilly areas for riding purposes. • Each zoo shall be closed to visitors at least once a week. • Each zoo shall have a wall at least two meters high from the ground level

18. Threats of jungle cat**PPT 154**

The biggest threat to Jungle Cat is habitat loss particularly industrialisation and urbanisation of low intensity agricultural areas. Habitat destruction for agricultural purposes and infrastructure development are also major issues. Some farmers consider the Jungle Cat a pest which takes poultry.

19. Animal enclosure**PPT 101**

Essential features regarding animal enclosures are:

- All animal enclosures in zoo shall be so designed as to fully ensure the safety of
 - i. Animals ii. Caretakers iii. Visitors
- Stand of barriers and adequate warning signs shall be provided for keeping the visitors at a safe distance from animals.

20. Threats of chukor**2 MARKS****PPT 196****Threats**

Severe winters are known to affect the Turkish populations. Pesticides may now be a cause for concern in some areas

21. Threats of Indian pangolin**3 marks****PPT 135****Threats**

Primarily threatened by Hunting, Poaching (for meat and scales), Illegal international trade. Up to 100,000 pangolins are estimated to be hunted and sold every year its meat is consumed as a source of protein locally. The meat is considered a delicacy in China, Vietnam and other parts of south-east Asia. Scales are used in whole or powdered form in the preparation of traditional medicines. An increase in the Agrarian economy Improved irrigation. The use of pesticides comprise additional threats to this species. Occasionally killed out of fear for having an odd shape

22. Description of kingfisher**2 MARKS****PPT 201**

A family of small to medium-sized, brightly colored birds. Order Coraciiform. They have a cosmopolitan distribution

23. Feeding of jungle cat

3 marks**PPT 154**

Feeding

Jungle Cats feed mainly on prey that weighs less than one kilogram. Small mammals, principally rodents with three to five rodent per day. Birds, waterfowl are the mainstay of Jungle Cat diet in the winter. Other prey species are taken more opportunistically, including hares, nutria, lizards, snakes, frogs, insects, and fish. They have been seen to scavenge kills of large predators such as the Asiatic lion.

24. Threats of sand dune cat

3 marks**PPT 118**

Threats

Habitat degradation and loss are considered to be the major threats to the Sand Cat. Many areas are also more heavily frequented by humans, their domestic animals and commensals (i.e. red fox, *Vulpes vulpes*).

- Arid ecosystems are being rapidly converted.
- Infrastructural development
- Human settlement and activity
- Degradation occurs through livestock grazing
- They are also killed in retaliation for killing chickens or Houbara and MacQueen's bustard
- Locally, Sand Cats may be threatened by the pet trade. In Iran, Sand Cats are reported to get killed by shepherd dogs and trapped in snares set for other species.
- Desert ecosystems, caused a decline in prey base. Introduction of feral and domestic dogs and cats creating direct competition for prey and through predation and disease transmission. They are also killed in traps laid out by inhabitants of oases targeting Red Fox, Rüppel's Fox and Golden Wolf (jackal) *Canis anthus*.

25. Zoo boom

3 MARKS**PPT 96**

- In the 1950s, there was a 'Zoo Boom'
- At that time entrepreneurs recognized the potential money to be made from exhibiting wild animals to satisfy public curiosity
- Until the 20th century, there was little or no concern for the welfare of zoo animals
- It was not until the late 1970s and early 1980s that the appearance of zoos began to change to reflect the public opinion
- People were then educated about the true conditions endured by zoo animals

26. Name endangered species in Pakistan

5 MARKS

- 1) Markhor
- 2) Mountain Weasel
- 3) European Otter
- 4) Vole
- 5) Indus river Dolphin
- 6) Branded eagle ray
- 7) Marco Polo Sheat

27. Threats of Kashmir flying catcher

PPT 139

The major threat is loss and degradation of its breeding habitat due to Commercial timber extraction. Conversion of land for agriculture. Livestock-grazing which has substantially altered forest understorey structure and composition Tree-logging for animal fodder, fuel wood and construction materials.

28. Which zoo have full fledge veterinary

PP104

Every large and medium zoo shall have full-fledged veterinary facilities.

- **Veterinary facilities must include a properly equipped**

- ✦ Veterinary hospital
- ✦ Basic diagnostic facilities
- ✦ Comprehensive range of drugs.

Each veterinary hospital shall have isolation and quarantine wards for newly arriving animals and sick animals.

These wards should be located as to minimize the chances of infections spreading to other animals of zoo.

29. Administration of large zoo

PPT 99

- No zoo shall acquire any animal in violation of Wildlife Act.
- No zoo shall exhibit any animal that is seriously sick or injured.
- No zoo shall use any animal, other than the elephant in plains and yak in hilly areas for riding purposes.
- Each zoo shall be closed to visitors at least once a week.
- Each zoo shall have a wall at least two meters high from the ground level.
- No zoo shall have any residential complexes for the staff within the main campus for the zoo.

30. Feeding of peafowl

PPT 189

Feeding habit

Omnivorous:

- Grain and green crops to insects
- Small reptiles
- Mammals
- Berries
- Termite
- Grasshopper
- Ants and beetles.
- Roots in high fairly open trees in large number.

31. Habitat of chukor

PPT 196

Habitat

Lives on barren rocky slopes with sparsely stunted grass and bushes. In winters, it comes down to an elevation of 1200-1500 m. Re ascends in summer to 2500 m.

32. Characteristics of Indian pangolin

PPT 135

The Indian Pangolin has Relatively tiny head, Hump-backed body. Thick tapering tail almost equal in length to its body. They are completely covered with scales. Made of keratin which is getting harden as the creatures get older. The scales bear fine longitudinal striation on their surface. There is hardly any external ear. The muzzle tapers to a narrow, down-curving snout. The hind legs are stout and rather columnar with five blunt pinkish white toe nails.

33. Most traded wild animal

PPT 135

Pangolins are considered to be the most traded wild animal in the world

34. Feeding habitat of barking deer

PPT 165

Feeding habit:

Diet includes grasses, low growing leaves, tender shoots and fruits.

35. How many Category for endangered species 3 marks

PPT 110

Categories of Endangered Species

“Species of organism which are in danger of extinction”

The endangered species are classified into three categories

- Critically Endangered(CR)
- Endangered(EN)
- Vulnerable (VU)

36. Facilities of zoo 3 marks

A zoo is defined as a permanent place where wild species are kept for exhibition to the public.

In theory all zoos should provide the following;

- Food and water
- A suitable environment
- Health-care
- An opportunity to express most normal behaviour
- Protection from fear and distress

37. Distribution of civets

PPT 185

The two species of civets found in Pakistan are:

- Indian civet (*Viverricula indica*)

Distribution

Indian civet is commonly found throughout riverine jungles and sand dune deserts of Punjab and Sindh.

- Palm civet (*Paradoxurus hermaphroditus*)

Distribution

The Palm Civet is a mountain species. Frequently occurs in Chitral, Swat, Dir, Azad Kashmir and Muree Hills.

38. Write character of panther

PPT 180

Leopards can adapt to any kind of land habitat

- Low land forests
- Mountains
- Grasslands and deserts.

Body size and color patterns of leopards varies geographically. Probably reflects adaptations to particular habitats. Black panthers, which are most populous in humid forests, are leopards with recessive melanistic genes. Savannah and woodland leopards tend to be relatively large while mountain and desert leopards tend to be relatively small. Leopards have short legs relative to their long body. They have a broad head, and their massive skull allows for powerful jaw muscles. Savannah and woodland leopards tend to be relatively large while mountain and desert leopards tend to be relatively small. Leopards have short legs relative to their long body. They have a broad head, and their massive skull allows for powerful jaw muscles. Coat ranges from tawny or light yellow in warm, dry habitats to reddish-orange in dense forests. Subspecies are distinguished according to unique pelage characteristics. Black rosettes on the body are circular in East Africa and square in South Africa. They have solid black spots on their chest, feet, and face and rings on their tail. Cubs have a smoky gray coat and their rosettes are not yet distinct. Leopards are sexually dimorphic as males tend to be larger than females. Females 17 to 58 kg ,Male 31 to 65 kg Females length from 1.7 to 1.9 m. Males length from 1.6 to 2.3 m. Nocturnal, rests in the day on a branch of tree, in dense vegetation or among rocks Progresses by a silent walk but can run upto a speed of 60km/h. Preys upon animals like goats, sheep, monkeys, rodents, etc. Typical lifespan in wild 10 to 12 years

39. Three rules zoo 3 marks

Watching animals and birds in their natural surroundings is a treat to eyes for many. Unfortunately, while getting this pleasure, we forget to follow the basic rules and Do's & Don'ts issued by the Zoo authorities

1. Do not enter Animal's enclosure
2. Do not feed animals
3. . Do not litter
4. Do not play music
5. Do not carry sharp objects or fire arms
6. Do not disturb environment
7. Do not eat inside
8. Do not smoke inside
9. Do not violate rules

40. Note on IUCN

PPT 35

International Union for Conservation of Nature and Natural Resources (I.U.C.N)

IUCN was founded in 1948. It is leading international, non-government organization concerned with conservation. Network of governmental and non-governmental organization.

Members:

IUCN has more than: 475 member organizations. 116 government agencies in 133 countries.

Functions:

Monitoring the status of conservation. Developing plans for dealing with problems such as the World Conservation strategy. Promoting action on their plans by government or organizations. Coordinating communication between the members and the commissions as well as the development. Providing advice and assistance to complement conservation measures. Selection and management of WWF projects. Managing the UNEP and C.I.T.E.S secretariat. Performing the continuing duties under conservation of wetlands of international importance, specially by waterfowl habitats.

41. What do you know about CITIES

PPT 38

Convention on International Trade in Endangered Species (C.I.T.E.S)

History:

CITES came into force in 1975, and became the only global treaty to ensure that international trade in plants and animals does not threaten their survival in the wild. Currently 180 countries, including the United States, implement CITES.

- A Secretariat, in Geneva, Switzerland.
- Permanent committees
- Non-governmental organizations.

Conference of the Parties meets every 3 years to review CITES implementation and assess the status of species in trade. Cacti, iguanas, and parrots represent some of the approximately 35,000 species protected by CITES. Species protected under CITES are listed in one of three appendices:

Appendix I

Species threatened with extinction and provides the greatest level of protection, including restrictions on commercial trade. Examples include gorillas, sea turtles, most lady slipper orchids, and giant pandas.

Appendix II

Species that, although currently not threatened with extinction, may become so without trade controls. **Examples** include American ginseng, paddlefish, lions, American alligators, mahogany, and many corals.

Appendix III

Species for which a range country has asked other parties to help in controlling international trade.

Examples include map turtles, walrus and Cape stag beetles.

42. Indian wild ass**3 marks****PPT 124**

The Indian wild ass are significantly larger than donkeys 200-290 kg in size, 2.1-2.5 m in headbody length. Coat is usually sandy, but varies from reddish grey, fawn, to pale chestnut. The animal possesses an erect, dark mane which runs from the back of the head and along the neck. The mane is then followed by a dark brown stripe running along the back, to the root of the tail. The belly, buttocks and muzzle are white.

43. Why postmortem reports is important in zoo room 3 marks**PPT 104**

Every zoo shall have a post-mortem room run under an expert veterinarian.

- Any animal that dies in a zoo shall be subjected to a detailed postmortem.
- The findings recorded and maintained for a period of at least six years.

44. Zoo with respect to area**3 marks****PPT 98**

Areas in hectares of the various categories of zoo

- Large Zoo (More than 75)
- Medium Zoo (50-75)
- Small Zoo (20-50)
- Mini Zoo (Less than 20)

45. Feeding habitat of common peafowl?**3 marks****PPT 189**

Feeding habit

Omnivorous:

- Grain and green crops to insects • Small reptiles • Mammals • Berries • Termite • Grasshopper • Ants and beetles. • Roots in high fairly open trees in large number.

46. Note on hygiene feeding**5 MARKS****PPT 102**

Maintenance of hygiene is important in every walk of life.

- Every zoo shall have ensure timely supply of wholesome and unadulterated food.
- The food must be in sufficient quantity to each animal according to the requirement of the individual animal, so that no animal remains undernourished.
- Every zoo shall have provide for a proper waste disposal system for treating both the solid and liquid wastes generated in the zoo.
- All leftover food items and animal excreta shall be removed from each enclosure regularly.
- Waste disposal should be done in a congenial manner to general cleanliness of the zoo.
- The zoo operators shall make available round the clock supply of potable water for drinking purposes in each enclosure.
- The periodic application of disinfectants in each enclosure shall be made according to the direction of authorized veterinary officer of zoo.
- For the maintenance of hygienic conditions, each zoo shall have the graveyard where carcasses of dead animals can be buried.
- This would not affecting the hygiene and cleanliness of zoo
- The large and medium zoo shall have an incinerator for disposal of the carcasses and other refuse material

47. Zoo with respect to animal**5 marks****PPT 98**

Number of the Animals exhibited

- Large Zoo (More than 750)
- Medium Zoo (500-750)
- Small Zoo (200-499)

- Mini Zoo (200)

48. Indus dolphin conservation action**5 marks****PPT 130**

Included in Appendix I of CITES

- The species is legally protected in all range states and occurs in a number of national parks and other designated areas, including dolphin reserves or sanctuaries.
- In 1972, dolphins were protected under the Wildlife Act of Sindh.
- In 1974 the government of Sindh declared the Indus River between the Sukkur and Guddu Barrages a dolphin reserve.
- The government of Punjab prohibited deliberate killing of dolphins in the Punjab Wildlife Protection Act in 1974
- Establishment of the Taunsa Wildlife Sanctuary and Chashma Wildlife Sanctuary in 1983 and 1984, respectively
- United Nations Development Programme (UNDP) to rescue dolphins trapped in irrigation canals and return them to the Indus mainstem has had some success in reducing mortality

49. Aesthetic important of wildlife**5 marks****PPT 12**

It is the pleasure to enjoy the beauty of wildlife

- † People enjoy seeing plants and animals in their natural habitats for recreation.
- † They are a source of joy, wonder, and pleasure for many people.
- † Wildlife tourism (ecotourism).
- † Bird watching, is now a growing part of wildlife tourism.
- † Animals photographed for recreational purposes also have aesthetic value.
- † Exotic game ranches
- † Viewing non-native species in a “near-native” habitat.
- † Visiting Safari parks/zoo as recreational activity
- † Visiting hilly areas for recreational purpose

50. Threats of Great Indian bustard**5 marks****PPT 128**

Threats

- High intensity Poaching
- Widespread hunting for sport and food
- Vehicular access to remote areas
- Egg-collecting was rampant in many states of India
- Habitat loss and degradation
- Lack of community support

51. Bobcat and its threats**5 marks****PPT 156**

Discription:

Generally “Lynx” is a wild cat with yellowish-brown fur. Body fur not spotted. Body length 70-76 cm . Tail comparatively long. Back of ears entirely black. Body covered with brick red fur. There is generally an off-white color on the lips, chin, and under parts. Black streaks on the body and dark bars on the forelegs and tail. Bobcats in the desert regions of the southwest have the lightest colored coats. In the northern, forested regions are darkest. Bobcat eyes are yellow with black pupils. The cat has sharp hearing and vision, and a good sense of smell. It is an excellent climber. The bobcat is crepuscular, and is active mostly during twilight.

Threats

The biggest threat to Bobcat is its fur. Habitat loss is another primary threat to bobcats in all of its range countries. Increasing urbanization results in direct habitat loss although. Bobcats have proven to be fairly adaptive to urbanization. Bobcats adjust to human developed landscapes, indirect effects increase. Vehicle collisions can be a primary source of mortality in urban Bobcat populations. Exposure to common rodenticides in urban landscapes can result in direct mortality (anticoagulant toxicosis). Increased

susceptibility to severe notoedric mange resulting in the death of Bobcats. In localized areas Bobcats take domestic livestock and are persecuted as pests.

52. Snow leopard

5 marks

PPT 113

Scientific Name: *Panthera Uncia*

Description:

The snow leopard, is strikingly different from the common leopard in appearance. It is recognizable by its Long tail, Almost-white coat spotted with large black rosettes. Dark rosettes and spots markings appear less well defined and are spaced further apart. Thick fur patterned with markings is the perfect camouflage for their rocky habitat, allowing them to stalk their prey. This pattern is unique to each individual snow leopard. Their beautiful coats are also made up of long hairs with a dense, woolly under fur to protect them against the cold. Snow leopards have longer tails than other big cats, up to 1 m in length and help the leopards to balance on steep and rocky slopes. Snow leopards are solitary animals, it is rare to see two snow leopards together. Unlike other large cats, snow leopards cannot roar. They can mew, growl, yowl and prusten. Body size can be up to 1.3m length Weight up to around 70kg. They can jump as much as 50 feet (15 meters). They mate in late winter, between January and mid-March. Males and females stay together for a short period. Males do not participate in rearing the cubs. The gestation period is 98 - 104 days. The litter size can be between 1 - 5 cubs, though 2 - 3 is more usual.

Snow leopards' favored prey are herbivores

Blue sheep, Argali sheep, Ibex, Markhr, Musk deer, Marmots and various species of hare and birds. In many areas, snow leopards also prey on livestock, bringing them into conflict with herders.

Distribution: Snow leopard generally inhabits elevations between 2000-4000m

Baluchistan, Chitral, Gilgit, Upper Swat valley, Slopes of Nanga Parbat, Khunjab N.P, Chitral gol N.p, Central Asia, Atli, Pamir, Hindu Kush, Karakorum, Himalaya

Population status

Estimated population of the snow leopard is between 3,920-6,390

- Afghanistan 100-200
- Bhutan 100-200
- China 2,000-2,500
- India 200-600
- Kazakhstan 100-110
- Mongolia 500-1,000
- Nepal 300-500
- Pakistan 200-420
- Russia 70-90
- Tajikistan 180-220
- Uzbekistan 20-50

There are as few as 6000 approximately snow leopards in the wild. Their numbers are declining due to habitat loss, poaching and the impact of climate change. Threat Status, Endangered.

Major threats to snow leopards

1. Poaching

Snow leopards have long been killed for their Beautiful fur, Bones, Body parts, Traditional Asian Medicine.

2. Conflict with communities

Retaliation for attacking herders' livestock. Decline in the leopard's natural prey is forcing them to rely more on livestock for food and increasing the risk of retaliatory killings. Due to hunting, competition from increasing livestock herds, and habitat loss.

3. **Shrinking home:** Snow leopards need vast areas to thrive. Expanding human and livestock populations are rapidly encroaching on their habitat. New roads and mines are also fragmenting their remaining range.
4. **Changing climate**

All the threats will be exacerbated by the impact of climate change on the fragile mountain environment. Hence, putting the future of snow leopards at even greater risk.

5. Lack of effective law enforcement.

53. Houbara busterd5 marksPPT 200

Scientific Name: Chlamydotis undulata

Description:

It is a large sized running bird. Measuring 60-70 cm in length. Weighs upto 1.5-2.5 kg. General body color is sandy ruff, pencilled splodged with black. Short crest of elongated feathers that are white at the base and tipped black. A ruff of black and white feathers on each side of the neck. Bill horny brown and legs greenish yellow. Females are somewhat smaller with ruff and neck plumes less developed.

Feeding habit:

- Omnivores but largely vegetarian.
- Feed on young shoots of wheat, mustard and other oil seed crops.
- Flowers of ground weeds, drupes and berries are also favored.
- It also feeds upon Black ants, Termites, Beetles, Grasshoppers, Centipedes, Small lizards and snakes

IUCN Status: Vulnerable

Distribution

Geographically it is distributed in a wide range across

- North Africa
 - Middle East
 - Western Asia
- Distribution Native:

Algeria, Egypt, Libya, Mauritania, Morocco, Spain, Sudan, Tunisia, Western Sahara

54. Note on Lynx Rufu5 marksPPT 156

RED LYNX

Lynx Rufus

Bobcat

IUCN Red list Threat Status: Least concern

Discription:

Generally “Lynx” is a wild cat with yellowish-brown fur. Body fur not spotted. Body length 70-76 cm . Tail comparatively long. Back of ears entirely black. Body covered with brick red fur. There is generally an off-white color on the lips, chin, and under parts. Black streaks on the body and dark bars on the forelegs and tail. Bobcats in the desert regions of the southwest have the lightest colored coats. In the northern, forested regions are darkest. Bobcat eyes are yellow with black pupils. The cat has sharp hearing and vision, and a good sense of smell. It is an excellent climber. The bobcat is crepuscular, and is active mostly during twilight.

Distribution

- Canada
- Mexico
- United States

Habitat

They are adaptable predators inhabiting

- Wooded areas
- Semi-desert
- Urban edge
- Forest edges
- Swampland environment



Like most cats, the bobcat is territorial and most of the time solitary, although there is some overlap in home ranges.

Feeding

The Bobcat hunt anything from insects and small rodents, rabbits and hares, to deer. Prey selection depends on location and habitat, season, and abundance.

Threats

The biggest threat to Bobcat is its fur. Habitat loss is another primary threat to bobcats in all of its range countries. Increasing urbanization results in direct habitat loss although. Bobcats have proven to be fairly adaptive to urbanization. Bobcats adjust to human developed landscapes, indirect effects increase. Vehicle collisions can be a primary source of mortality in urban Bobcat populations. Exposure to common rodenticides in urban landscapes can result in direct mortality (anticoagulant toxicosis). Increased susceptibility to severe notoedric mange resulting in the death of Bobcats. In localized areas Bobcats take domestic livestock and are persecuted as pests.

Conservation actins

Listed on Appendix II. More research needs to be undertaken to gain knowledge of current distribution, both in and outside of protected areas.

55. Categorization process

5 marks

PPT 110

Categorization process should only be applied to,

- Wild populations inside their natural range.
- For listing the organism in any of the category there is a range of quantitative criteria.
- Meeting any one of these criteria qualifies a taxon for listing at that level of threat.
- Each taxon should be evaluated against all the criteria.
- Some criteria will be inappropriate for certain taxa.

56. Grizzly bear

5 marks

PPT 160

BROWN BEAR

Scientific Name: Ursus arctos

IUCN Red list Threat Status: Least concern

Syn; Grizzly Bear Description:

Large animals, dark in colour, long guard hair over the shoulder, characterized by a distinctive humps on shoulders, long claws on the front paws. Sexual maturity: 4.5 to 7 years of age.Litter size ranges from one to four but two are common. Cubs remain with their mothers for at least two and half years.Female breed every three years.

Feeding habit:

Chiefly vegetarian. Feed mostly on fruits, honey and ants. Occasionally kill sheep and goat.

The brown bear ranged across a large portion of North America throughout across North Africa. Presently it occupies North America, Europe and much of northern Asia.

It’s native countries are:

Afghanistan, Iran, Canada, Iraq, China, Pakistan, Georgia, Italy, India, France.

Threats

Brown Bears are attracted to areas with available human-related foods. Being large and somewhat aggressive, these bears may threaten life and property (often agricultural products) and may be killed as a consequence. When Brown Bears exist in a large, contiguous population. They are sometimes hunted for sport, killed for control purposes. Brown bears are poached for the commercial trade in gall bladders and paws. In portions of Alaska, the management goal is to reduce bear populations to encourage Moose and Caribou populations to expand for the benefit of hunters. Habitat fragmentation with increasing human populations.

Conservation actins

Conservation actions vary greatly among nations and regions within nations. In Russia, Japan, Canada, Alaska, and parts of eastern and northern Europe). Large populations of this species are legally hunted, and thus managed as a game animal.

57. Characteristic of male tragopan 5 marks PPT 198

Medium sized pheasant. Sexes are highly dimorph. Male grey upper parts and reddish facial skin Numerous white spots. Each spot bordered with black and deep crimson patches on the sides and back of the neck. The throat is bare with blue skin while the bare facial skin is red. They have a small black occipital crest.

- Weighs 1.8–2.2 kg (4.0–4.9 lb)
- Length from 55–60 cm (22–24 in)

Females have pale brownish-grey upper parts finely vermiculated. Spotted with black, and most of the feathers have black patches and central white streaks.

- Weigh 1.25–1.4 kg (2.8–3.1 lb).
- Length 48–50 cm (19–20 in).
- Monogamous

58. Note on Hog deer 5 marks PPT 137

Common Name: Para

Scientific Name: Axis porcinus

National status: Vulnerable

IUCN Red list Threat Status: Endangered

Description

It is Smaller and stouter in built and hog like in appearance. Small deer with short delicate legs and rather bulky heavy body.Its pelage is coarse .General coloration is dark olive-brown,lacking any rufescent tinges when viewed from a distance. It has round ears which are fringed from inside with white hairs. Some adults (especially females) have scattered pale spots in their summer coat (particularly on either side of the darker dorsal line) The short tail is quite bushy. The surface of the horns is somewhat smooth with less corrugation. Lives solitary or in pairs.Average antler size is 30-38 cm. Females are slightly smaller and without antlers.

Habitat and Ecology

Shrub dominated wetlands. Artificial terrestrial plantations like Changa Manga ,Riverine area, It prefers to live in grassy patches bordering forests.

Distribution

Pakistan

- Changa Manga Plantation
- Head Qadarabad
- Ferozwalla
- Head Marala

- Taunsa wildlife Sanctuary
- Riverine forests in Sindh

Para Axis porcinus

Distribution

Native:

- Bangladesh, Bhutan, Cambodia, India, Nepal

Possibly extinct:

- China, Myanmar, Viet Nam

Reintroduced:

- Thailand

Introduced:

- Australia, Sri Lanka, United States

Threats: Hog Deer is hunted in various parts of its range. It is hunted for Meat (bushmeat trade). Traditional medicinal products.

Trophy antlers: It is also possible that hunting could be stimulated by demand for captive animals.

Conservation Actions

Hog Deer is fully protected in Bangladesh,India. One subspecies is listed on CITES Appendix I. It is protected by National legislation in countries of its range

59. Record maintain in zoo

5 marks

PPT 106

Maintenance of Records:

Every zoo shall keep the record of all animals in terms of their Birth, Acquisitions, Sales, Disposals and Death.

Every zoo shall prepare and maintain an inventory record

Zoo ID, Animal ID, Scientific name, Sex, Origin, Birth, Parents, Death, Out of stock

Every zoo shall prepare and maintain a daily record:

Health, Behavior, Feed and Feeding, Management, Health Care, Problems if any.

Every zoo shall also prepare a brief summary and an annual report of the activities of the zoo for every financial year particularly.

Death of the animals in the zoo with reason of death identified on the basis of

- Post-mortem reports
- Diagnostic tests

60. Where great Indian bustard are found

5 marks

PPT 128

- a) Desert National Park, Rajasthan
- b) Kutch Bustard Sanctuary, Gujarat
- c) Gaga Wildlife Sanctuary, Gujarat
- d) Rollapadu Wildlife Sanctuary, Andhra Pradesh
- e) Great Indian Bustard Sanctuary, Maharashtra

Arid, Semi-arid grasslands with scattered short scrub, bushes and low intensity cultivation in flat or gently undulating terrain. Birds congregate in traditional grassland patches

61. Urial and sub species

5 marks

PPT 168

Prominent species in Pakistan

- 1. Ovis ammon (Marpolo sheep)

2. Ovis orientalis (Urial)

Ovis orientalis

Urial is a wild sheep with long legs and relatively small horns, native to central Asia. Urial is represented by three sub species in Pakistan.

Ovis orientalis vignei Ladakh Urial or Shapu

Fur tends to be more greyish in winter and less red. The chest ruff is comparatively short with black hairs predominating. The horns turn markedly inwards at their tips

Distribution:

Found in Chitral & Northern areas. On mountains upto 3000 meters elevation

Status: Endangered

Ovis orientalis blandfordi

Afghan or Baluchistan Urial. Luxuriantly developed neck ruff. The body fur is reddish. The rams have horns which often develop more than a complete arc. Tips of horn bending slightly outwards

Distribution:

Found in Sindh, Baluchistan and Southern hilly regions of KPK.

Status: Endangered

Ovis orientalis punjabiensis

Locally called as Punjabi Dunba. Tend to be smaller and stouter in build compared with the Afghan sub-species. Mature rams develop a conspicuous saddle mark in the form of a vertical band of mixed black and white hairs. Horns are more massive at their base than the Afghan population. Horns never curve round in more than a complete arc.

Distribution:

Occurs in between the Indus and Jhelum rivers at elevations of 250 -1,500 m

- Salt range • Kala Chitta • Jhelum hills.

Status: Endangered

Threat:

The status of Punjab urial is susceptible to physical and emotional injury.

Reasons for Decline in numbers

- Poaching
 - The capture of newborn lambs that are kept as pets
 - Fragmentation of home ranges
 - Competition with domestic livestock
- Habitat disturbance and destruction associated with increasing agriculture, forestry and mining. The construction of the M-2 Motorway between Islamabad and Lahore created a substantial barrier to seasonal migrations and to dispersal.

62. Striped Hyaena	5 marks	PPT 116
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Scientific Name: Hyaena hyaena

IUCN status: Critically Endangered

Description

Hyena’s are large sized dog like carnivores with big head, massive cheek teeth, carnassials well developed, long developed fore legs and each foot has four toes with non-retractile claws. Body fur with yellowish fawn ground and in distinct broad vertical black stripes with close set black stripes on legs. The Striped Hyaena has a conspicuous crest of longer hair extending like a mane from the crown of the head to the pelvis. The ears lack any bursa or pouch-like fold on their outer margin and are sharply haired and black skinned. The legs are relatively long and slim. The dorsal crest generally has black hair and these are erected when the animal is nervous or excited. Voice is almost human like, it can

also imitate the cries of other animals by which means dogs, calves and sheep are deceived. They are scavengers feeding on carrion but will also attack on live cattle

Habitat

- Rocky areas • Hot desert • Wild open valley • Semi-desert areas.

Distribution

In Pakistan, it is distributed in Hilly tracks of Baluchistan & Sindh

Recently Known Localities

Kall, Bhal, Palugram, Daphar Plantation, Jals park, Qaderabad, Sukh-Beas near Chunian & Changa Manga, Kirthar National Park

Threats

It is considered as an enemy species .Due to the non-availability of natural food it tends to scavenge near human habitations and increasing incidents for its killing.

63. Common peafowl	10 marks	PPT 189
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Fact file:

Peafowl is the term given to 2 species of bird.

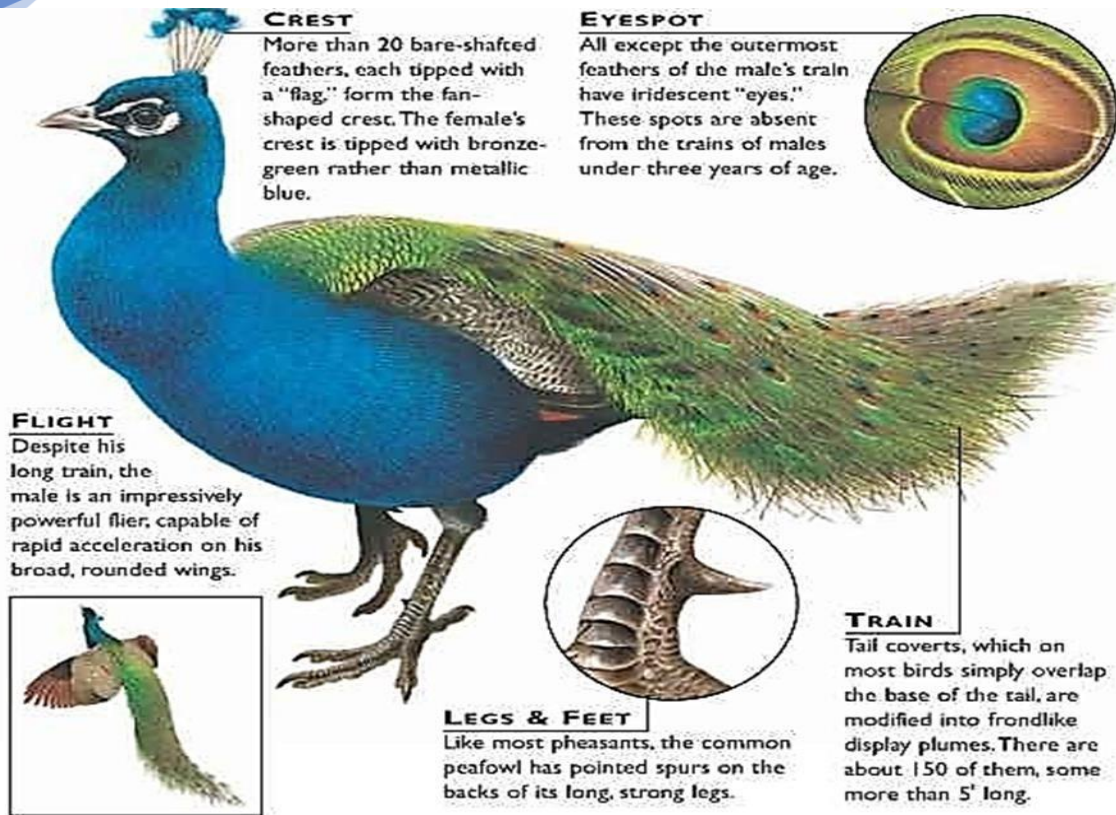
- The Indian Peafowl (Pavo cristatus)
- The Green Peafowl (Pavo muticus)

Males are known as ‘Peacocks’ which are members of the pheasant family. Females as ‘Peahens’. The Peacock is the National bird of India.

Description:

Indian blue peafowl are known best for their exquisite train and plumage. The peafowl is considered one of the largest flying birds. If the length of the tail and wing span is included, They weigh in between 2.7-6 kg. Wingspan of 1.4-1.6 m. They vary widely in length from 0.862.12 m. This species has long, strong, grayish-brown legs equipped for running away into brush for safety. Both sexes are equipped with spurs that are around 2.5 cm long. Males will use them during the breeding season to ward off other competing males. Females are brown, grey, and cream-colored. Chicks are usually a light yellow to brown color. Pea fowl neck and breast is a Bright blue, golden feathers line their sides and backs. Both male and female Peafowl have crests on top of their heads.

- Polygynous
- Familiar displays
- Clutch size: 3-6 eggs.
- Incubation is by female only last for 28-30 days



The males have a long train ("tail") about 1.2 m in length from June to December. The train is discarded in January. Train grown again at a rapid pace when breeding season approaches. Trains are an iridescent arrangement of multiple colors featuring ocelli (eye-spots). When displayed, the male's train spreads out in a wide fan showing off gold, brown, green, and black feathers. Around 30 to 40 of the ocelli around the outer edges of the fan are not round but v-shaped. This complicated pattern is thought to be an advantage in mating.

There are three variations in the Indian blue peafowl. (when bred with another white feathered peafowl, all their offspring will be white feathered peafowl as well)

The white feathered peafowl

Having completely white feathers from the top of its head to the end of its train. Ocelli barely visible. These are not albinos because they are true breeders and have brown eyes.

Pied

Random white feathers appear in the plumage. This results from an incomplete dominant gene

Black-winged peafowl

Dark feathers with blue and green tips. In addition, *Pavo cristatus* can hybridize with the green peafowl, *Pavo muticus*. For the past two decades, a new mutation in the plumage has been discovered almost every year.

Distribution

Native: Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka

Introduced: Australia, Bahamas, New Zealand, United States.

Distribution in Pakistan:

- Tharparkar district, bordering India and Sukhar
- Small areas in Azad Kashmir
- Changa Manga

IUCN status: Least Concern

Feeding habit

Omnivorous:

- Grain and green crops to insects
- Small reptiles
- Mammals
- Berries

- Termite
- Grasshopper
- Ants and beetles.
- Roots in high fairly open trees in large number.

64. Musk deer

10 marks

PPT 166

IUCN Red list Threat Status: Endangered

Musk deer can refer to any one, or all seven, of the species that make up Moschus, the only extant genus of the family Moschidae. The musk deer are lacking antlers.

Description

Markedly different from other species of deer. No glands on face and foot. Females have only two mammary glands. 50 cm high and weighs about 11-12 kg. Hind legs are much longer than the fore legs. Ears very long and prominent. Tail is very short and completely hidden in anal hair. Body covered with thick long bristly hair. Color greyish brown with grey spots on the back. Male has downwardly projecting canines about 8 cm in length and are used in fighting. Musk is present in the musk pouch which is present below the skin of the abdomen of male only.



Distribution

In Pakistan it is found in sub alpine zones of Himalayas. At about 2500-4000 m altitude in Chitral, Gilgit, Hazara and Azad Kashmir.

Threats

There is a high trade in Musk deer parts, particularly pods, into China and elsewhere in northeast Asia. Hunted for meat, which is considered a delicacy locally. Trade of musk glands, which has led to a substantial increase in hunting since long. The musk is valued for its cosmetic and pharmaceutical properties. Yield of the musk is only about 25 grams

Conservation actins

This species is listed on CITES Appendix I. The high value of the parts in trade mean that conservation requires effective hand-on anti-poaching activity.

65. Detail note on Tragopan

10 marks

PPT 198

Facts:

Tragos= goat

Pan=Greek god

Tragopans are commonly called "horned pheasants" Having two brightly colored, fleshy horns on their heads. They can erect during courtship displays. There are five recognized species of tragopans.

- Western tragopan (Tragopan melanocephalus)
- Satyr tragopan (Tragopan satyra)
- Temminck's (tragopan Tragopan temminckii)
- Blyth's tragopan (Tragopan blythii)
- Cabot's tragopan (Tragopan caboti)

1. Tragopan melanocephalus

Syn: Western Tragopan , Black-headed Tragopan, Western Horned-pheasant

Description:

Medium sized pheasant. Sexes are highly dimorph. Male grey upper parts and reddish facial skin Numerous white spots. Each spot bordered with black and deep crimson patches on the sides and back of the neck. The throat is bare with blue skin while the bare facial skin is red. They have a small black occipital crest.

- Weighs 1.8–2.2 kg (4.0–4.9 lb)
- Length from 55–60 cm (22–24 in)

Females have pale brownish-grey upper parts finely vermiculated. Spotted with black, and most of the feathers have black patches and central white streaks.

- Weigh 1.25–1.4 kg (2.8–3.1 lb).
- Length 48–50 cm (19–20 in).
- Monogamous

Feeding Habit

The diet primarily consists of leaves of trees and shrubs. Also includes roots, flowers, acorns, seeds, berries, grubs and insects. Tragopans are shy and wary birds quick to hide amongst the dense vegetation they inhabit if disturbed.

Distribution

Native:India , Pakistan

Found in western Himalayas, between 8000-12000 from hazara eastward to Garhwali- ladakh

IUCN Status: Vulnerable

Distribution in Pakistan

- Largely restricted to area between Jhelum and Kunhar rivers of Hazara district
- Forest of Kaghan valley, in Machiara National park (A.K)
- Pales valley in Cholistan district

Threats

Hunting and trapping for

- Its meat (especially in winter)
- Its decorative plumage

Conservation

CITES Appendix I

66. Note on Capra hircus10 marksPPT 174

Females are beardless but carry backward curving horns. Measure upto 15 cm and bear fine annulations towards their base. The younger males and females show a characteristic shape pattern with a dark stripe running from the corner of eye to the muzzle. Mature males are spectacularly beautiful and may have horns over one meter in length. In adults the hair coat is of reddish buff in color. The belly and the outside of lower limbs, beard and fore part of face varies from black to chestnut brown in color. The shoulder height. They are capable of surviving in very arid desert conditions. They inhabit mountain crests upto 3300 m.

- In males is 85 to 95 cm. In females 55 to 60 cm.
- The weight of adult Males up to 120 kg, Females 50 to 55 kg

67. NOTE ON Chinkara10 marksPPT 178

Scientific Name: Gazella gazella

Description:

The body is covered with long coarse reddish grey hair having a blue grey underwood in winter coat. The belly and throat hair are pure white The fur is shorter showing less admixture of white hair in the summer coat. The legs are very long and slender. With dark brown tufts of hair on the knees (carpus) of the forelegs. The hooves are black, sharply pointed. The muzzle is fully covered with whitish hair up to the nostrils which have somewhat been elongated. The iris in the comparatively large eyes is almost black. Chinkara are semi nocturnal starting to forage mainly in cultivated crops before sunset. They retreat forage by the morning deep in the desert. They are mainly browsers utilizing the foliage and fruits of natural shrubs. They even take trees, and in drought periods, even the green twigs. Grasses form a major part of their food during the monsoon. Tendency to keep to small groups of 2-3 individuals. Females nearly always bearing horns comprising straight smooth spikes. The average horn length of males is 10 -12 inch measured over the curve. The young are susceptible to predation from jackals and wolves and possible caracal cats. The adults probably have no serious enemies except man.



Gestation:

Five and half months single is born. Twins are reported occasionally. The female mature at the age of 12 months.

Longevity

in wild is not known, in captivity they live for 12-13 years.

Distribution: Found in Western and Central India, Pakistan, Thar desert, Afghanistan, Iran.

68. Note on Kashmir stage	10 marks	PPT 167
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Scientific Name: Cervus canadensis hanglu

Synonym: Hangul

IUCN Red list Threat Status: Critically Endangered

Discription:

Stag is a male deer, especially a male red deer after its fifth year. Morphologically almost similar to that of other deers. Each antler consists of five tines. This deer lives in groups of 2 to 18 individuals in dense riverine forests and high valleys, and mountains of the Kashmir valley and in Himachal Pradesh.

Distribution

Does not occur permanently in Pakistan. Reported to exist in forests of Neelam valley, Azad Kashmir, etc. Fairly distributed in occupied Kashmir

Threats

The species is illegally hunted. The illegal hunting is one of the main reasons for the species' decline in the past and present.

69. Capa ibex and its sub species	10 marks	PPT 174
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Description:

Females and young males have a reddish brown tan or a golden color in summer with a greyish brown appearance in winters. Older males have rich brown chocolate coloration, they usually live above tree line from about 3660m to over 6000m.

Distribution:

It is fairly widespread in Baltistan, Dosai, Gilgit, Chitral.

70. Write note on Cheer pheasant	10 marks	PPT 191
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Facts:

Pheasant is a large long-tailed game bird. The male of which typically has very showy plumage.

Description:

These birds lack the color and brilliance of most pheasants, Buffy gray plumage Long gray crests. Bill is pale and horny. Bare skin round eye brighy red. Its long tail has 18 feathers. The central tail feathers are much longer and the colour is mainly gray and brown. Top of head and crest blackish-brow, edges paler and tipped with grey. The female is slightly smaller in overall size. Sexual dimorphism is slight. Birds have many vocalizations including a very distinctive crowing. Incubation is performed by female Clutch size9-10 eggs.

Distribution

In the highlands and scrublands of the Himalayas region of

Native:India, Nepal, Pakistan



Distribution in Pakistan

Formerly abundant throughout Siran Kaghan valley Marghalla hills, Swat and Kohistan districts. At present restricted to several small pockets of Kashmir. 50-60 pairs of breeding captive birds are well kept at Dhodial (Manshera)in KPK

Feeding habit:

Major food:

- Roots
- Tubers
- Seeds
- Berries
- Various insects

IUCN status: Vulnerbale. It is listed on Appendix I of CITES.

71. Write note on nilgai	10 marks	PPT 177
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Scientific Name: Boselaphus tragocamelus

Description:

Nilgai means blue cow. The male has blueish, grey colour. Females are yellowish brown in colour. It is a sturdy animal with stout legs and long sloping horse like neck. Both sexes have a course mane of long and narrow, almost horse like Nose black and nabbed. There is a small pit gland below the eye. The tail is long bearing tuft of coarse black hair on the middle forepart of the neck. Both sexes have conspicuous while stocking marks above the fetlocks and hooves. The male has black cow like horns, curving slightly backwards and outwards, while the female has no horns. Adult males are heavier than the females. They feed in early morning and late evening Grazing grass as well as browsing on trees. They also favoring succulent fruits and leaves. Agricultural crops are raided by the animals and sometimes they become a problem. Breeding populations exist only in changa manga and Lal suhanra plantations. Individuals along the Pak-India border intermigrates. In view of the declining population, they are not allowed to be hunted. Gestation: 247 days. Usually twins are born rarely a single.

Longevity

- In wild is 12-15 years

- In captivity is 18 years.

The young spend most of the 10 days lying down and standing up only to Suckle.

Distribution:

Native: India; Nepal; Pakistan

Regionally extinct: Bangladesh

Introduced: Mexico; United States. The tropical thorn forest. Uncultivated semi deserts of Pakistan

Mainly occurring around the Indian border: In the north eastern corner of the Punjab, and further south around fort Abbas in cholistan. Small populations still exist in changa manga (kasur) and Lal suhanra (Bahawalpur) irrigated forest plantations. Some individuals are also reported to stray in thraparkar areas in Sindh from across the indo pak border.

72. Genera of goat in Pakistan 10 marks

ppt 171

Prominent genera of goats in Pakistan

- Naemorhedus
- Hemitragus
- Pseudois
- Capra

Grey Goral

Scientific Name: Naemorhedus goral

Description

This genus is represented by only one species in Pakistan. It is a small sized animal whose face is deer like but other characteristics are those of wild goats. It attains a height of 60-70 cm at shoulder. Weighs about 25-28 kg. General body coloration is dark greyish blue. Older buck tends to be darker. The tail is longer than other the wild goats. There is a conspicuous black mark in the front of the fore legs. In both males and females, the horns are slender, black, conical and curving backwards at the tip. Males without beard. Ears broad and bell shaped. Females are with four mammary glands

Distribution

In Pakistan, it is found in Himalayan foothills. At about 800-1500 m elevation Margalla, Swat, Hazara, Malakand and Parts of Neelum Valley (Azad Kashmir).

1. Himalayan tahr

The word "tahr" comes from the Nepali word thār. The genus “Hemitragus” comes from the Greek words . Hemi meaning "half" and trágos meaning "goat”.

Distribution:

Native: China; India; Nepal

Introduced: New Zealand; South Africa

Pakistan: Restricted to Pir Punjal Range in Azad Kashmir.

2. Pseudois nayaur

Description

Commonly called as Blue sheep or Bharal. It shows characteristics intermediate between sheep and goats. It has smooth cylindrical horns (not wrinkled as found in true wild sheep). Sub orbital gland is absent. Adult males have a salty blue coat in winters and are beardless. In general appearance and size, it looks like the famous wild sheep “Shapu”.

Distribution:

Native: Bhutan; China; India; Myanmar; Nepal; Pakistan

In Pakistan: Hunza, Karakoram Range in Baltistan.

73. Note on barking deer 10 marks

ppt 165

Muntjacs

Muntiacus muntja

Cervus moschatus

Cervus muntjak

IUCN Red list Threat Status: Least concern

It gives calls similar to barking, usually upon sensing a predator. Hence the common name for all muntjacs of "barking deer"

Description:

It is a little dainty creature and weighs about 22-25 kg. Coloration varies from deep brown to yellowish with creamy or whitish markings. Only males have antlers. The upper canines of the male are elongated into tusks, which curve strongly outward from the lips. Females also develop small tusks in the upper jaw. Capable of inflicting severe injuries with these tusks, when defending themselves or their fawns. Two bony ridges are present in the front part of the skull.

Feeding habit:

Diet includes grasses, low growing leaves, tender shoots and fruits.

Distribution

Native: Brunei Darussalam; Indonesia; Malaysia; Thailand

Regionally extinct: Singapore

Pakistan: Confined to Himalayan foothills. Commonly found in Margala hills, Swat and Azad Kashmir.

Threats

Generally Muntjac is an important source of bushmeat. Selected body parts and the foetus are also used in traditional medicine. Individuals are usually killed during, or shortly after, their capture. Foothold snares are commonly used as well as spears and firearms. Dogs are often employed.



74. Write note on Axis axis 10 marks

ppt 164

Chital

Scientific Name: Axis axis

Syn; Spotted deer, Axis deer

IUCN Red list Threat Status: Least concern

Description:

The species is sexually dimorphic. Males are larger than females, and antlers are present only on males. The antlers, three-pronged, are nearly 1 metre (3.3 ft) long and shed annually. The upper parts are golden to rufous, completely covered in white spots. The abdomen, rump, throat, insides of legs, ears and tail are all white. 76-91 cm high, grazing and gregarious deer, living in herds of 5-30. Weighs up to 95 kg. Prefers open types of forests. It has been recorded in Punjab but has become rare in the recent past. Chital are active throughout the day.

Feeding habit:

Grazers as well as browsers, the chital mainly feed on grasses throughout the year

Distribution



Native

A species of deer that is native in the Indian subcontinent. Bangladesh, Bhutan India, Nepal, Sri Lanka

Introduced

Argentina; Armenia; Australia; Brazil; Croatia; Moldova; Pakistan; Papua New Guinea; Ukraine; United States

Threats

There are presently no major global-level threats to Chital. Chital are hunted for food, sport and a variety of other purposes

BEST OF LUCK