

ZOOGEOGRAPHICAL REGIONS

Lecture 2



PALAEARCTIC REGION

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Subject: Zoology

Course Title: Zoogeography

&

Paleontology

M.Sc. II (Evening) Semester III

PALAEARCTIC REGION

EXTENT:

- It is the **largest** zoogeographical region.
- It includes whole of Europe, northern part of Africa, northern China, USSR, Japan, Iran, Afghanistan and Baluchistan province of Pakistan.

PALEARCTIC REGION

Scale 1 inch = 200 miles



PHYSICAL FEATURES

- Palaeartic region is bounded by sea in the west, north and east and by Sahara desert and Himalayan range in the south.
- It is continuous with its two neighbors – Ethiopian and Oriental region. The former is separated by Sahara and the later by Himalayas.
- Nearctic is separated by Atlantic Ocean today but in the past it was connected by a land bridge called **Bering Strait**.

CLIMATE

- The climate is more or less temperate.
- The region includes both wet forests, coniferous forests and dry open steppe lands.
- Eastern Asia including China and Japan contain deciduous forests.
- Wide range of temperature, great fluctuations in rainfall, great diversity of surface features are the characteristics of the Palaearctic region.

ZOOLOGICAL CHARACTERISTICS

- 28 families of land **Mammals**, excluding the numerous bat families.
- Does not have any large spectacular mammals.
- There are moles, shrews, rabbits, hedgehogs, squirrels, porcupines, hyenas, camels, bears, donkeys, sheep, oxen, deers, cats and dogs.

UNIQUE MAMMALS

- **Two** families of unique mammals- **Spalacidae** and **Selevinidae**. Both are rodents.
- Each family is represented by only one genus.
- *Spalax* is a brownish yellow burrowing rat.
- *Selevina* was discovered in 1938 from Kazakhstan.



Spalax



Selevinia

AVIAN FAUNA

- The Palaearctic birds include:
Hawks, ducks, storks, cuckoos, kingfishers, swifts, swallows, thrushes, loons, finches, grebes, blackbirds, etc.
- There are no parrots.
- Only **one endemic** family of birds in the region is the **hedgehog sparrow** family.



Hedgehog Sparrow

REPTILIAN FAUNA

- The reptilian fauna is characterized by:
 - Turtles
 - Tortoises
 - Lizards
 - Snakes
- **Alligators** are found in **China**.
- Does not have any endemic family of reptiles.

AMPHIBIAN FAUNA

- Palaeartic region is **important** from the point of view that it has a large number of “**tailed amphibians**”, the Newts and Salamanders.
- of the tailless amphibians, the common toads and frogs are widespread.
- **Tree frogs** of hylid and polypedatid families are present.

NEWT



TREE FROG

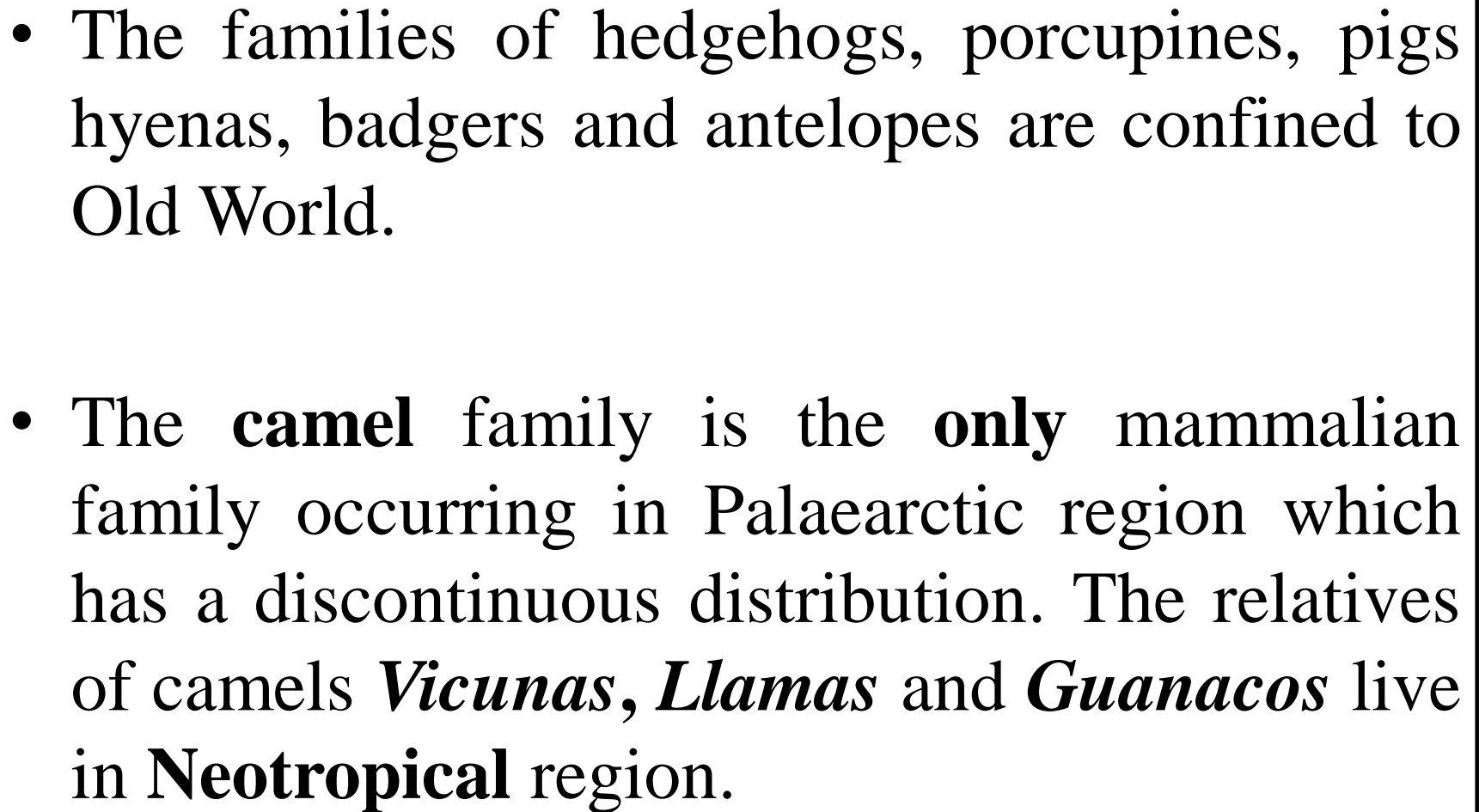


SALAMANDER



AFFINITIES

- The vertebrate fauna of Palaearctic is not very rich and presents a complex of Old World tropical families and temperate New World fauna.
- Of Palaearctic mammals, rabbits, murids, dogs and bat families are worldwide in distribution.
- The shrews, squirrels, mustelids and members of cat families are present in every region except Australia.

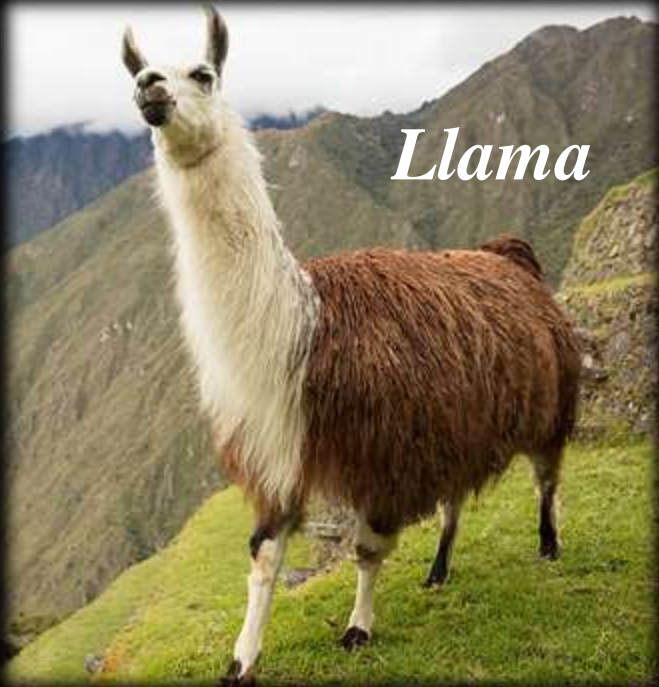
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- The families of hedgehogs, porcupines, pigs, hyenas, badgers and antelopes are confined to Old World.
 - The **camel** family is the **only** mammalian family occurring in Palaearctic region which has a discontinuous distribution. The relatives of camels *Vicunas*, *Llamas* and *Guanacos* live in **Neotropical** region.



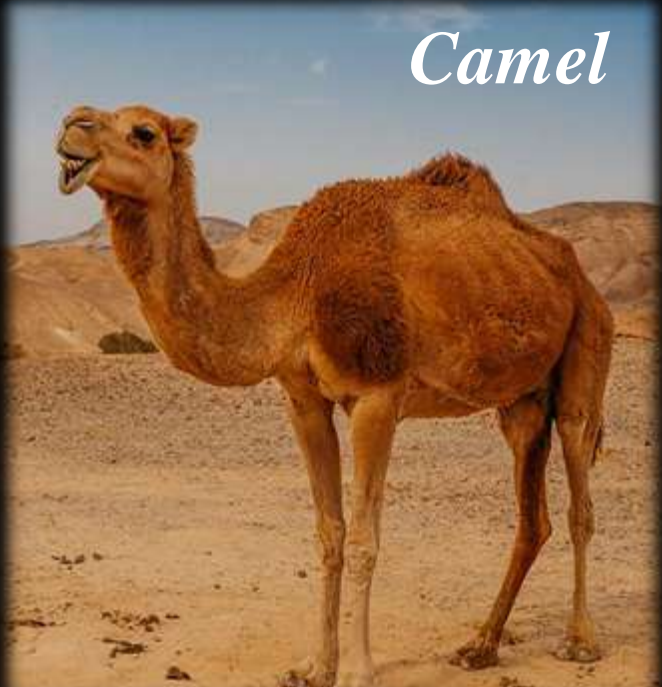
Vicuna



Guanaco



Llama



Camel