

A toucan bird with a large, colorful beak (yellow and orange) and black body is perched on a branch. The background is a blurred green forest. A black rectangular box is overlaid on the right side of the image, containing the text 'NEOTROPICAL REGION' in white, bold, serif font.

**NEOTROPICAL  
REGION**

**PROF. DR. SABIHA FAZAL**

Subject: Zoology

Course Title: Zoogeography

&

Paleontology

M.Sc. II (Evening) Semester III

# EXTENT

- The whole South America, most of Mexico & West Indies
- Joined to Nearctic region by a land bridge called Isthmus of Panama
- Separated from all other regions by sea

# NEARCTIC REGION

Scale 1 inch=1000 miles



London: Macmillan & Co.

Standard Geographical Entry London

25 YEARS

# PHYSICAL FEATURES & CLIMATE

- Mostly tropical but Southern region extends into South temperate zones
- High rainfall in Amazon River Basin all year
- Extensive tropical rainforests
- Total absence of deserts
- **Pampas**: Tree less grassy plain in non tropical part of South America, east of Andes mountain.
- In south there is severe climate of southern Pantagonia, the isotherm of  $0^{\circ}\text{C}$  passing in winter

# Zoological Characteristics

- Rich and specialized fauna, **155** vertebrate families
- 39 of these are peculiar to this region - **the highest number of endemic families for any region**
- 32 families of Mammals (excluding bats), 7 are widely distributed and 16 are unique
- **Endemic** : Xenarthra or Edentata
  - Sloths (arboreal : live upside down from trees)
  - Anteaters ( tubular toothless mouth)
  - Armadillos ( Fossorial: burrowing forms)



1. Armadillo



2. Three-toed Sloth



5. Great Anteater

- **Two families of Marsupials**
  - Caenolestidae (shrew opossum) exclusive
  - Opossum (also found in Nearctic)



shrew opossum



Opossum

- South American **monkeys** are exclusive.
  - Brilliantly colored
  - Flat nose
  - Smaller than Old World monkeys
  - Little larger than squirrel
- Two families

**1. Cebidae**



**2. Callithricidae**





- 11 endemic families of rodents
- 5 indigenous families of bats including **vampire bats** .



- Two families of mammals show discontinuous distribution
  - Camel
  - Tapirs
- **Camelidae** otherwise Palearctic are represented in Neotropical by endemic **Llama**
- **Tapirs** are found in Malaya, Java and Sumatra on one side and South America on the other



Tapir



Llama

# BIRD FAUNA

- Bird fauna is diversified and unique
- South America is known as “**Bird continent**” due to high endemism of bird fauna
- Rhea (American ostrich) and Tinamous (partridge like bird) are exclusive to this region

Rhea



Tinamou



- Brilliantly colored birds such as toucans, macaws, parrots, oil birds, humming birds, sand thrushes, tree creepers, plant cutters, sugar birds and puff birds are present in this region
- Scarcity of song birds
- No representative of pheasant family



Macaw



Toucan



Humming Bird

# REPTILIAN FAUNA

- Reptiles are abundant and rich
- Dominated by crocodiles, caimans, mud turtles, side-necked turtles, geckos, boas, pit vipers, coral snakes and anaconda, the largest python snake





Anaconda

# AMPHIBIAN FAUNA

- Amphibian fauna is moderately rich
- Includes a variety of tree frogs, common frogs and toads
- Tailed amphibians represented by only one genus *Oedipus*



*Oedipus*

# FISH FAUNA

- Carp fishes absent
- Fauna dominated by characins, gymnotids and catfishes
- Gymnotids (the electric eels) are not related to mormyrids of the Ethiopian region but the characins are shared by both regions
- *Lepidosiren* (the lungfish of South America) is related to *Protopterus* (the lungfish of Ethiopian region)



*Lepidosiren*

# AFFINITIES

- Neotropical region possesses the highest number of endemic families. The reason being the long period of isolation
- No representation of many commonly occurring families
- No hedgehogs, moles, beavers, hyenas, bovids and native horses.

- It is amazing that only a few years ago wild horses were present in both north and south America
- No anthropoid apes and dog-shaped monkeys
- Like Palaeartic and Nearctic, the Neotropical region shares mice, dogs, bears, mustelids, cats, deers, etc.

- It shares with Nearctic some important groups of animals like opossums, armadillos, porcupines and peccaries
- The vertebrate fauna of the region is supposed to be the remnant of Old Tertiary times
- The richness of fauna is particularly evident in the tropical parts of Neotropical region