

**ZOOGEOGRAPHICAL
REGIONS**

Lecture 4

**ETHIOPIAN
REGION**

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Subject: Zoology

Course Title: Zoogeography

&

Paleontology

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ETHIOPIAN REGION

EXTENT:

- It consists of whole **Africa** (except the northern part which is included in Palearctic region) and southern part of Arabia.
- The large island of **Madagascar** with its small neighbors such as **Mauritius** and **Comoro** islands are also included in this region.
- The fauna of these islands is quite distinctive so some zoogeographers prefer to treat them separately as ancient islands.

ETHIOPIAN REGION

Scale 1 inch = 1000 miles



EXPLANATION

Terrestrial Contours

From sea level to 1000 feet	White
1000 feet to 2000	[Light Green]
2000 - 5000	[Medium Green]
5000 - 10000	[Dark Green]
10000 - 20000	[Brown]
Above 20000 feet	[Black]

The Marine Contours of 1000 feet is shown by a dotted line.

Plains lands shown thus	[Light Green]
Forest	[Dark Green]
Desert	[Yellow]

The boundaries and reference numbers of the sub-regions are shown in Red.

PHYSICAL FEATURES

- The region is bounded on all sides by sea except on northern side which is continuous with **Sahara**, the **largest desert** in the world.
- Sahara desert forms an effective barrier between the Palaeartic and the Ethiopian region.

CLIMATE

- Since nearly whole of Africa lies in the **tropics**, the conditions of life are much more uniform.
- It has big rivers, high up mountains, vast grassy lands and thick tropical forests.
- In January, the whole region experiences a temperature between 20° to 30°C, while the temperature of central Africa is slightly higher.
- The distribution of flora and fauna is more influenced by moisture than temperature.

ZOOLOGICAL CHARACTERISTICS

- The fauna of Ethiopian region is very rich. Varied and well marked.
- It has **161** families of terrestrial vertebrates.
- The African scene is pictured with herds of large mammals like gorillas, chimpanzees, lions, monkeys, giraffes, zebras, antelopes, leopards, rhinoceroses, hippopotamuses, elephants, wolves, hyenas, etc.
- Only the shrews, cercetid mice, rabbits, cats mustilids, squirrels and bovids have a wide distribution.

12 EXCLUSIVE MAMMALIAN FAMILIES

- Hippopotamidae (Hippopotamus)
- Giraffidae (Giraffe)
- Orycteropidae (Aardvarks)
- Potamogalidae (Otter shrews)
- Chrysochloridae (Golden moles)
- Macroscelidae (Elephant shrews)
- Anamoluridae (Flying squirrels)
- Pedetidae (Spring haas)
- Thyronomyidae (Cane rats)
- Petromuridae (Rock rats)
- Ctenodactylidae (Gundis)
- Bathyergidae (Sand rats)



Hippopotamus



Aardvarks



Giraffe



Flying squirrels

AVIAN FAUNA

- Birds are very numerous and include cuckoos, hornbills, kingfishers, bee-eaters, weaver birds, orioles, owls, goat suckers, storks, pigeons, parrots, pheasants, sunbirds, guinae fowls, secretary birds, ostriches, etc.
- **six** families of birds are unique to this region. These include ostriches, secretary birds, hammer-heads, crested touracos, mouse birds and helmet shrikes.

REPTILIAN FAUNA

- Reptilian fauna is quite rich and includes reptiles such as turtles, agamids, crocodiles, monitor lizards, pythons, vipers, boas, etc.
- Of the total **50** species of **chameleon** in the world, **46** are found in this region.
- **Girdled lizards** are peculiar to this region.

Chameleon



Girdeled Lizard

AMPHIBIAN FAUNA

- Amphibians are less distinctive.
- Frogs and toads are numerous.
- Tailed amphibians are absent.
- Tree frogs are absent.
- Family Dactyethridae, represented by genus *Xenopus* (Clawed toads), is exclusive to this region.



Xenopus laevis (Clawed toad)

FISH FAUNA

- Ethiopian fish fauna is diverse and includes many **primitive groups** such as polypterus, protopterus, mormyrids.



Protopterus



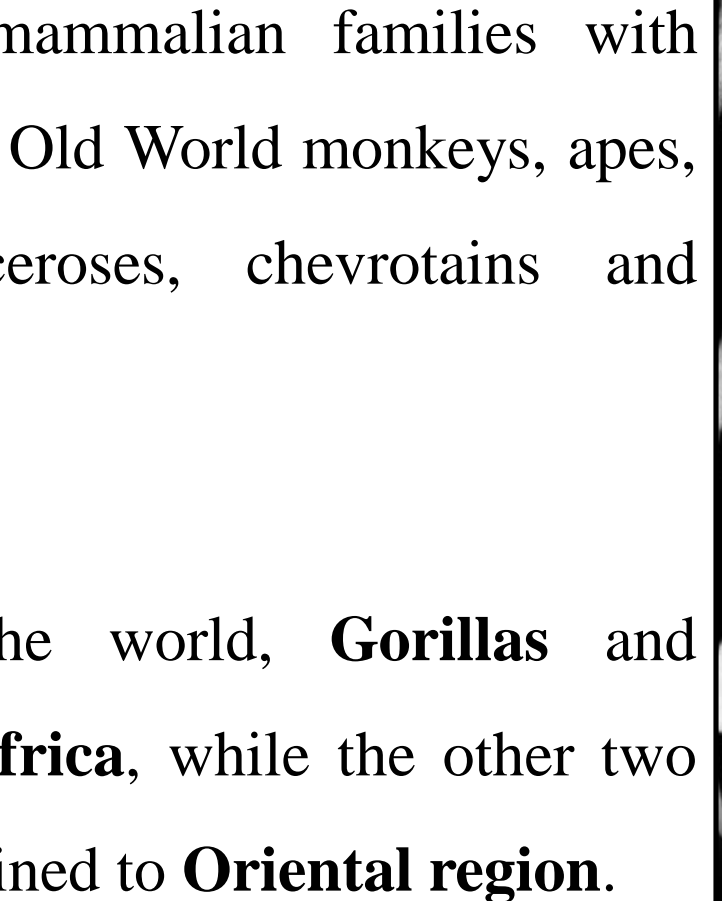
Polypterus



Mormyrids

AFFINITIES

- In number of the **unique** families of vertebrates, it ranks **second** only to the Neotropical region.
- The Ethiopian region **shares** with **Palaeartic** families of jerboas, coneys, dormice and wild horses but it also **differs** markedly from this region in lacking moles, beavers, bears and camels.

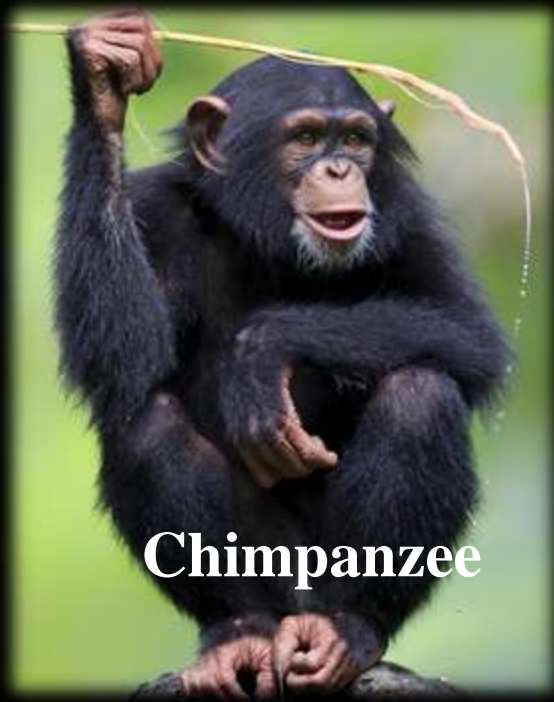
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- Ethiopian region **shares eight** mammalian families with **Oriental region**. These are lorises, Old World monkeys, apes, bamboo rats, elephants, rhinoceroses, chevrotains and pangolins.
 - Of the **four** great **apes** of the world, **Gorillas** and **Chimpanzees** live in forests of **Africa**, while the other two **Orangutans** and **Baboons** are confined to **Oriental region**.



Orangutan



Gorilla



Chimpanzee



Baboon