



**NEARCTIC
REGION**

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Subject: Zoology

Course Title: Zoogeography

&

Paleontology

M.Sc. II (Evening) Semester III

NEARCTIC REGION

EXTENT

- It covers the whole of North America.
- Extends to the south as far as the middle of Mexico.
- Includes Greenland.

NEARCTIC REGION

Scale 1 inch=1000 miles

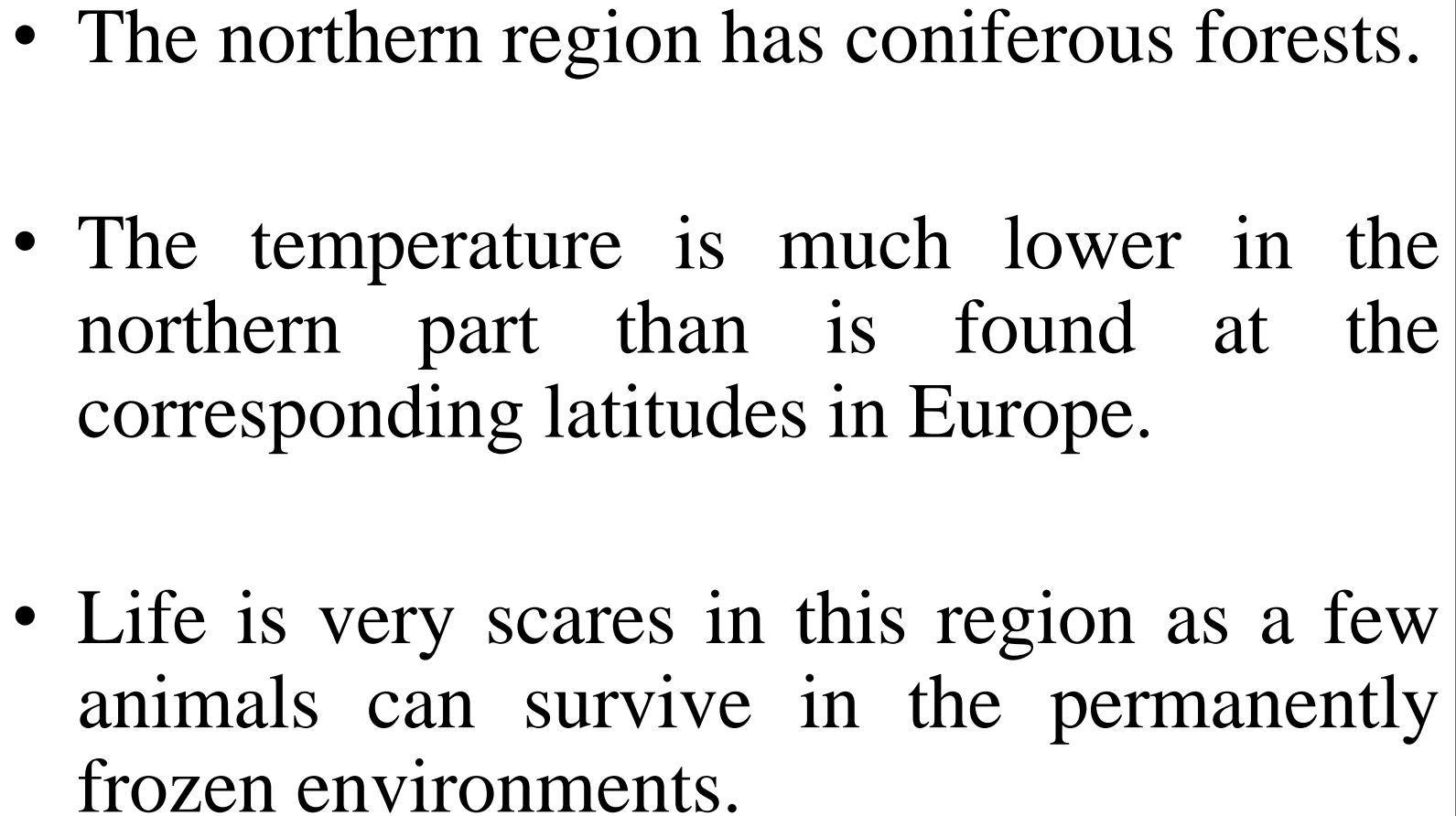


London: Macmillan & Co.



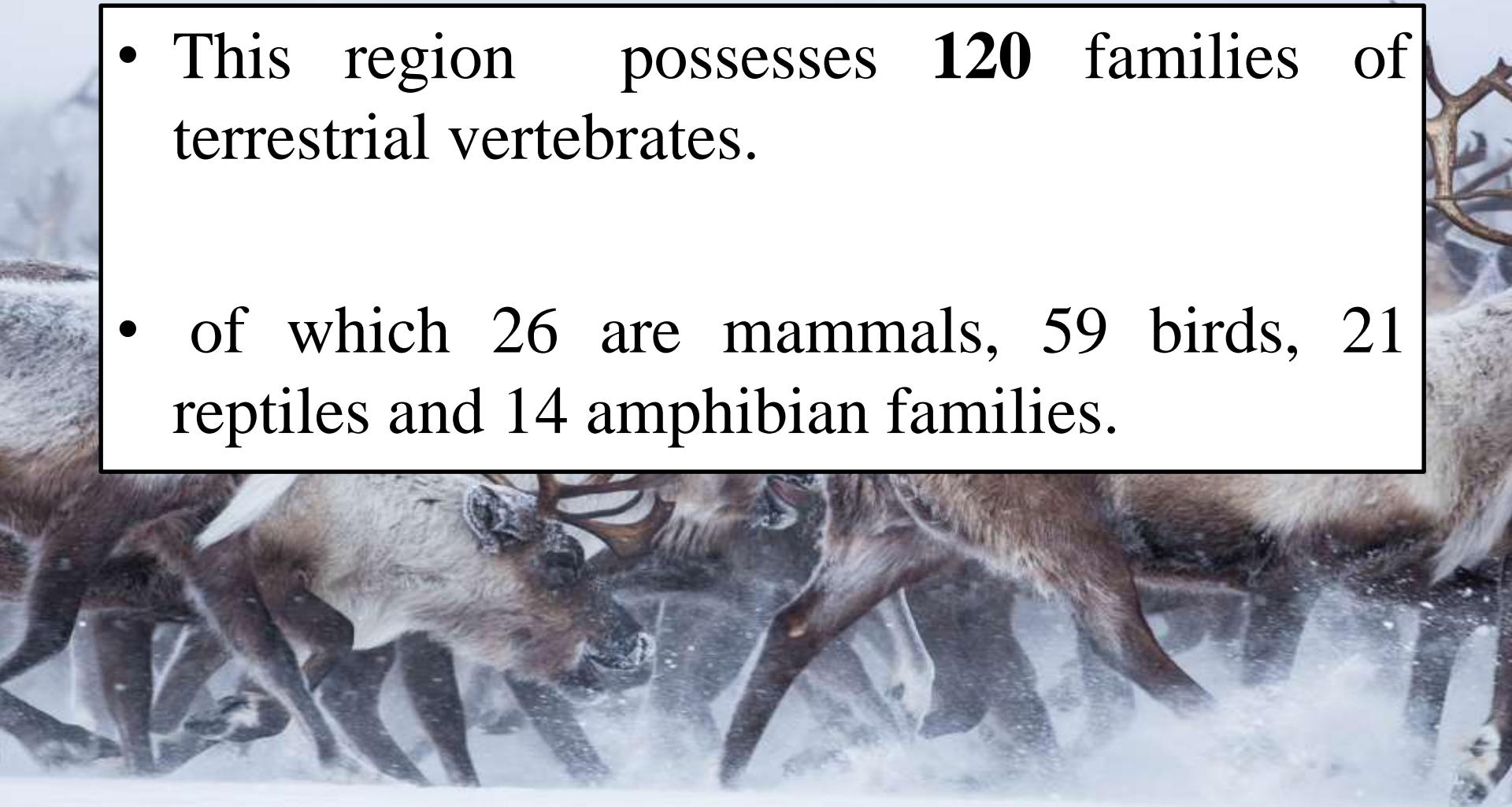
PHYSICAL FEATURES AND CLIMATE

- Nearctic region presents a great variety of physical features.
- Greenland is entirely arctic and is buried completely beneath a mass of ice of unknown thickness.
- The eastern part is composed of mixed deciduous forests.
- The middle part is composed of grasslands.

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- A background image of a snowy, mountainous landscape. In the foreground, the back and legs of a reindeer are visible, standing in the snow. The background shows a range of snow-covered mountains under a pale, overcast sky.
- The northern region has coniferous forests.
 - The temperature is much lower in the northern part than is found at the corresponding latitudes in Europe.
 - Life is very scarce in this region as a few animals can survive in the permanently frozen environments.

ZOOLOGICAL CHARACTERISTICS

- This region possesses **120** families of terrestrial vertebrates.
- of which 26 are mammals, 59 birds, 21 reptiles and 14 amphibian families.



ENDEMIC VERTEBRATE FAMILIES

- 5 families are peculiar and endemic to this region

MAMMALS:

Aplodontidae (Swellel, mountain beaver)

Antilocarpidae (prong-horn buck)

BIRDS:

Chamaedae (wren tits)

REPTILES:

Annielidae (California lizard)

AMPHIBIANS:

Sirenidae (mud eel, a tailed amphibian)

MAMMALIAN FAUNA

- Mammals include:

Haplocercus (rocky goat)

Ovibus (musk ox)

Bison (American buffalo)

Ursus (bear)

Caribou (reindeer)

Scalops (web-footed moles)

Taxidea (American badger)

Armadillos, opossums, deers ,etc.

Musk Ox



Bison



Bear



Reindeer

AVIAN FAUNA

- Peculiar ones are **grouse** and **turkeys**.
- Other important birds are wood-warblers, red-cardinals, humming birds, hawks, pelicans, herons, cranes, vultures, sand pipers, kingfishers, etc.



Turkey



Grouse



Wood-warbler



Pelicans.

REPTILIAN FAUNA

- Crocodiles and alligators.
- Snapping and musk turtles.
- Geckos, anguids, skinks, **Heloderma** (gila monster, **the only deadly poisonous lizard** in the world).
- Greater snake, rattle snake and coral snake is among the important reptilian fauna.



Snapping Turtle



Coral Snake



Heloderma



Geckos

AMPHIBIAN FAUNA

- Amphibian fauna is comparatively rich.
- Tailed amphibians such as salamanders, axolotls and sirens are present.
- Frogs and toads are also numerous.
- In the mountain streams of North West USA lives a peculiar frog, *Ascaphus*. Like other frogs it is tail-less but it has tail-wagging muscles, suggesting descent from some tailed ancestor.

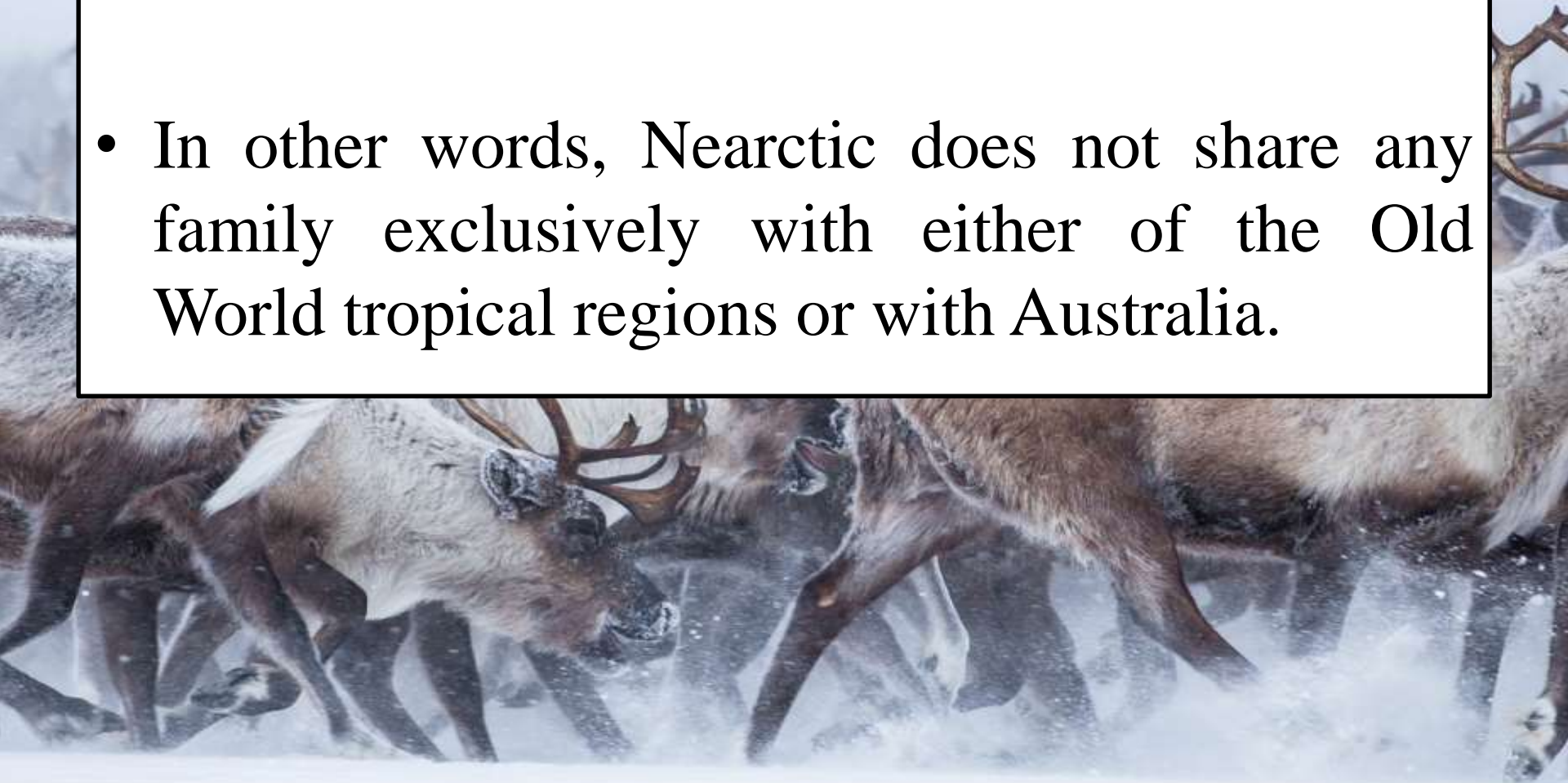


Ascaphus

AFFINITIES

- The fauna of Nearctic region is characterized not only by the animals which are present but also by the absence of otherwise widespread families in the neighboring regions.
- There are no hedgehogs, hyenas or pigs from Palaearctic region.
- No tapirs from Neotropical region.
- More surprisingly no camels which are represented in both Palaearctic and Neotropical regions.

- Out of 24 families of Nearctic land mammals, none has a discontinuous distribution.
- In other words, Nearctic does not share any family exclusively with either of the Old World tropical regions or with Australia.



- Fauna of Nearctic as a whole is very similar to that of Palaearctic. Both regions possess wild cats, bears, wild oxen, deers, rabbits, moles, squirrels, wren-tits and many others.
- Heilprin in 1887 suggested the union of these two regions into one great region called **Holarctic** on the basis of resemblance of fauna. Newton, Huxley and Lydekker also approved this scheme.
- Nearctic and Palaearctic regions share **nine** families of land vertebrates which are **exclusive** to this so called **Holarctic region**.

- Nearctic is joined to Neotropical region by Isthmus of Panama.
- Weasels, flying squirrels, jumping mice, opossums, armadillos, tree porcupines and peccaries are immigrants from Neotropical region through this land bridge.
- In short, the fauna of Nearctic region is a complex of New World tropical and Old World temperate families.