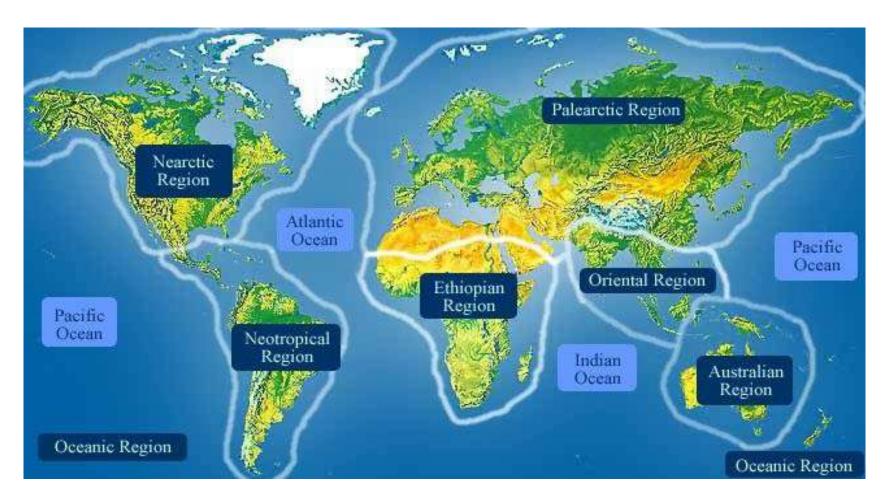
# **Nearctic Region**



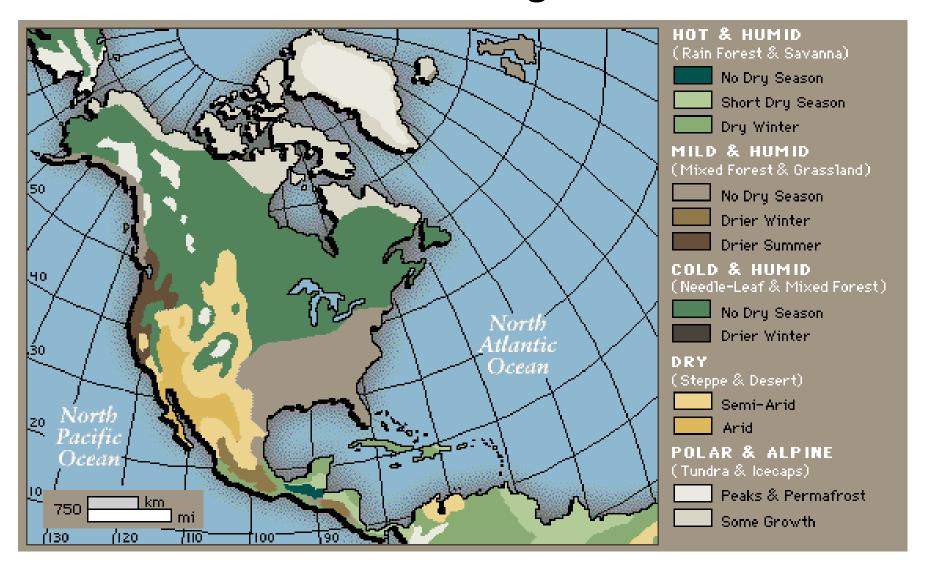
North America above tropics

# Nearctic Region-divisions

- Wallace divided Nearctic into 4 subdivisions that corresponds to different climatic and vegetational areas
  - Northern one extending across continent
  - Eastern (Below northern one)
  - A west Central (Rocky mts etc.)
  - Pacific Coast (California one)



#### Nearctic Region



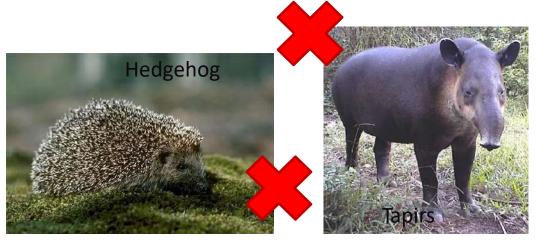
# **Nearctic Region**

- ➤ North America to Middle of Mexico (South) (North of Tropical Mexico)
- ➤ Greenland (East) & Alentian Islands (West)
- ➤ Except a narrow strip of Central America (Panama Isthmus) cut off from other regions by sea
- ➤ Climate & vegetation resembles Palearctic
- ➤ Climate North Temperate with an Artic Fringe
- ➤ Eastern North America: Deciduous and mixed forests (Mid latitudes)
- ➤ Westward (in the middle part): Extensive grassland
- Farther west: Arid country from which rise mountains with strips of mixed or coniferous forest
- ➤ Northward: First great stretch of coniferous forest and then tundra

- 24 families
- None has a discontinuous distribution
- Does not share a family with old world tropics or Australia
- Total number of families less than palearctic and so many families unexpectedly absent, Nearctic has 4 endemic families

- Many Palearctic and Neotropical families not represented
- No hedgehogs, hyenas, or pigs from Palearctic
- No tapirs from Neotropical
- No camels from both neighboring regions-Palearctic and Neotropical





- Nearctic has 4 endemic fam-
- 3 fam.-Rodents and 1 artiodactyl
  - (Found in the West of the region primarily)
- Rodents-
- 1. Pocket Gophers
   2. Pocket Mice
  - (live in the arid areas of West and South of N. America)
- 3. Sewellel
  - (near water in mountaneous areas of the Pacific Coast)
- 4. Pronghorns
  - (on the prairies of Western and Central North America)

# Nearctic Region-Endemic Mammals

Pocket Gophers

**Pocket Mice** 



(These rodents live in the arid areas of West and South of N. America)

# Nearctic Region-Endemic Mammals



#### Sewellel (Aplodontia rufa)

Common names: Aplodontia, Boomer, Ground Bear, Giant Mole, Mountain Beaver

(This rodent lives near water in mountaneous areas of the Pacific Coast)

# Nearctic Region-Endemic Mammals

 Pronghorns (on the prairies of Western and Central North America)

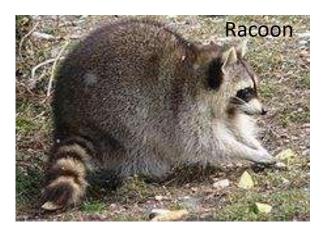




(This Artiodactyl is related to deer and bovid but different from them in construction of the short and branched horns)

- Largest proportion made by those with a wide range such as
  - Rabbits
  - Squirrels
  - Cricetid rat and mice
  - Dogs
  - Mustelids- weasel fam.-sea otter, weasel, badger, Ferret etc.
  - Cats and Bats

- Forms with a considerable though not identical range
  - Bears
  - Procyonids- Racoons, Coatis and ringtail cat
  - Deer
  - Bovids- cow, buffallows, antelop etc.







- Four fam shared with neotropical
- Immigrant from neotropical
  - Opossum
  - Armidillo
  - Tree porcupine
- Primarily northerly origin

Opossum

Peccary



- Human Introductions
  - Murid Mice
  - Horses
  - Domesticated pigs

- Mixture of families
  - shared with Palearctic Region (especially in the North)
  - With numerous endemic genera in some groups especially rodents
  - Some shared with Tropical America

### Nearctic Region- Reptiles

- Home of many reptiles
- Many Snapping trurtles
- Musk turtles

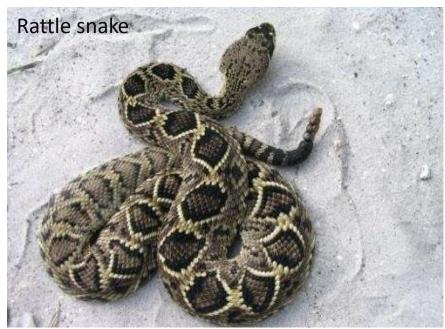
Terrapene



# Nearctic Region-Reptiles

- Typical Nearctic snakes not confined
  - Harmless garter snakes and poisnous rattle snakes





### Nearctic Region- Reptiles

- Typical Nearctic Lizards not confined
  - Geckos, horned iguanid lizards and skinks



### Nearctic Region- Endemic Reptiles

#### Exclusive Nearctic Lizards

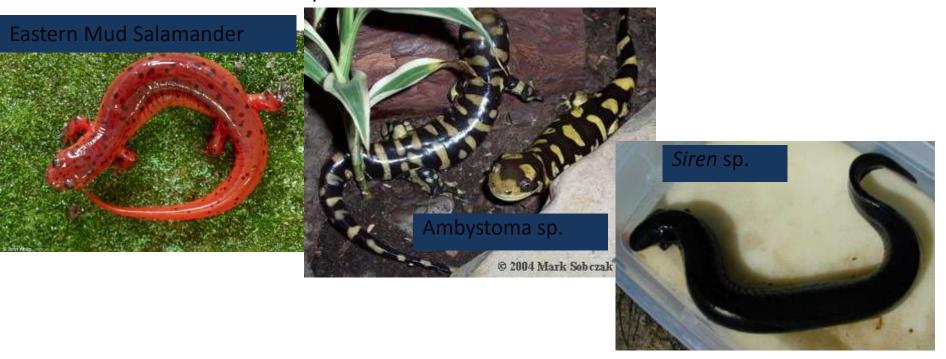
- Gila Monster Heloderma (excl fam.) *Gopherus* sp.
- An endemic genus of land tortoise,
   Gopherus (Gopher tortoises)
- Anniellids (Anniella sp.) legless lizard

Gila Monster, Heloderma

Anniella sp.

# Nearctic Region- Amphibia

- Tailed amphibia abundant (some shared with Palearctic) (others more or less confined to the region)
  - American Salamanders
  - Ambystomid axolotls
  - Several neotenous forms of Urodeles with reduced limbs e.g. Siren (gills retained into adult life)



# Nearctic Region-Amphibia

 N.west USA-frog Ascaphus (no tail but tail wagging musclesdescent from some tailed ancestor) Similar to Liopelma of New Zealand



# Nearctic Region-Amphibia

- Common frogs
- Toads
- Hylid tree frog

# Nearctic Region- Birds

- 49 families of which 39 widely distributed
- Less differentiated avifauna than neighbouring regions
- Wood warblers throughout temperate N. America
- Several distinctive genera of grouse



# Nearctic Region-Birds

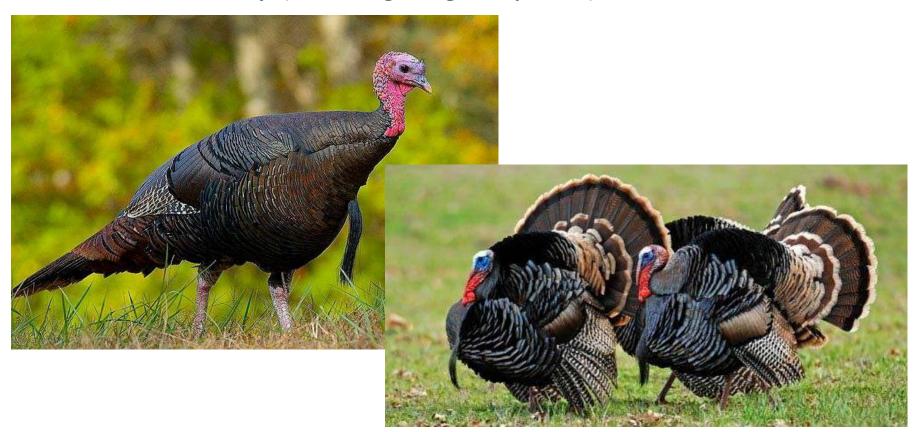
- Similarity with Neotropical region (their original home)
  - Bright red cardinals
  - Tanagers

Humming Birds



# Nearctic Region-Birds

- Exclusive Bird
  - Wild Turkey (Meleagris gallopavo)



# Nearctic Region-Birds

- Some including many migratory ones are shared with central and south America
- Some especially northward shared with Palearctic region
- Some are endemic

# Nearctic Region- Fishes

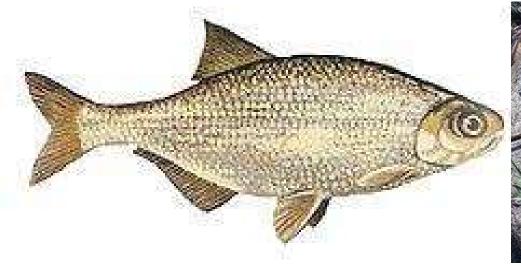
A few ancient and endemic families

 Garpike, <u>Lepisosteus</u> (with covering of thick scales) and Bowfin (*Amia calva*)—only living members of group Holostei



# Nearctic Region-Fishes

Mooneye (*Hiodon tergisus*) and Bass families – exclusive





# Nearctic Region- Fishes

Many carps and perches



# Nearctic Region Affinities

- Similarity With palearctic region
  - Fauna complex of tropical and temperate families (as both the regions are north temperate and have land connections with tropical regions).
  - Fauna as a whole much less rich than the tropical regional fauna and is mainly transitional and with few important groups of its own except of freshwater fishes.

# Nearctic Region Affinities

- Dissimilarity With palearctic region
  - nearctic richer in reptiles & has more endemic fam,
  - Fauna combination of new-world tropical and old world temperate