

Biogeography. Lecture 14

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Outline

Taxonomy

Most important groups

Animalia, animals

Deuterostomia: Phylum Chordata

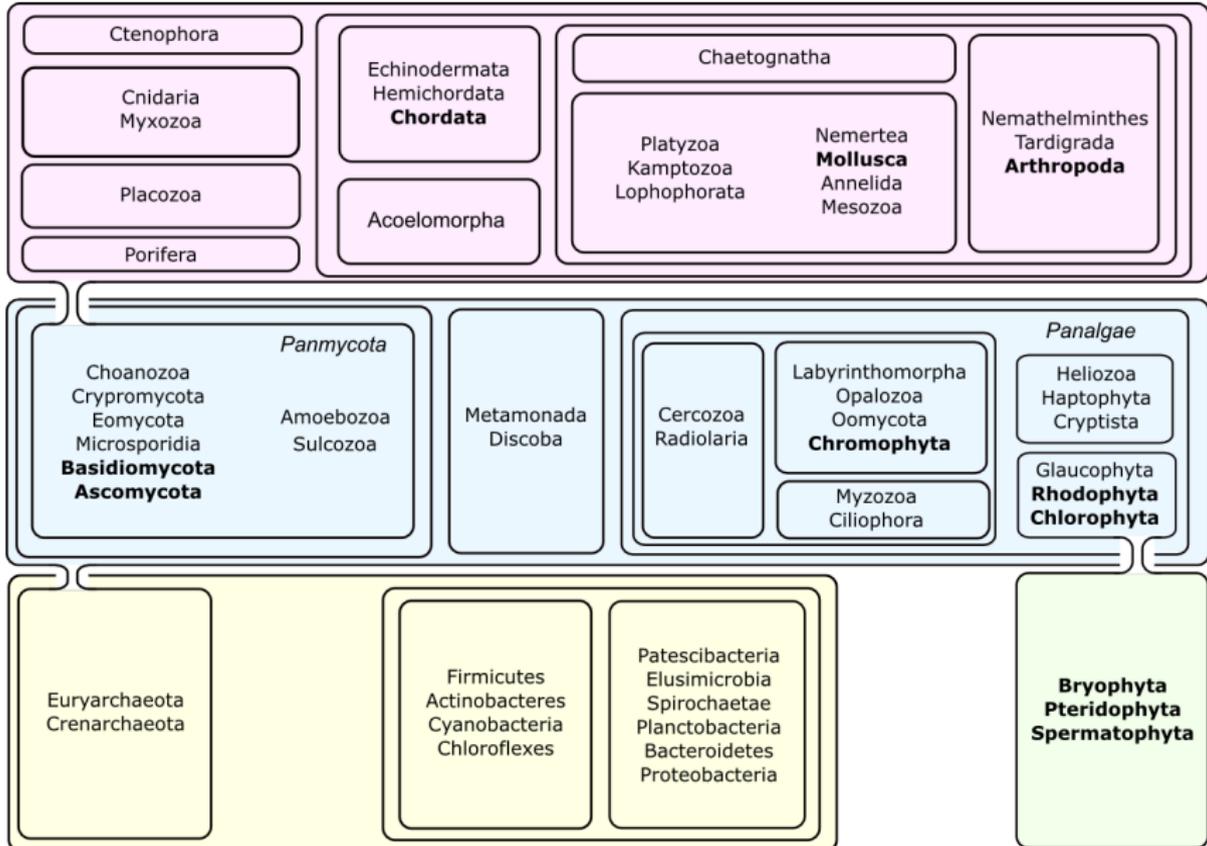


Taxonomy

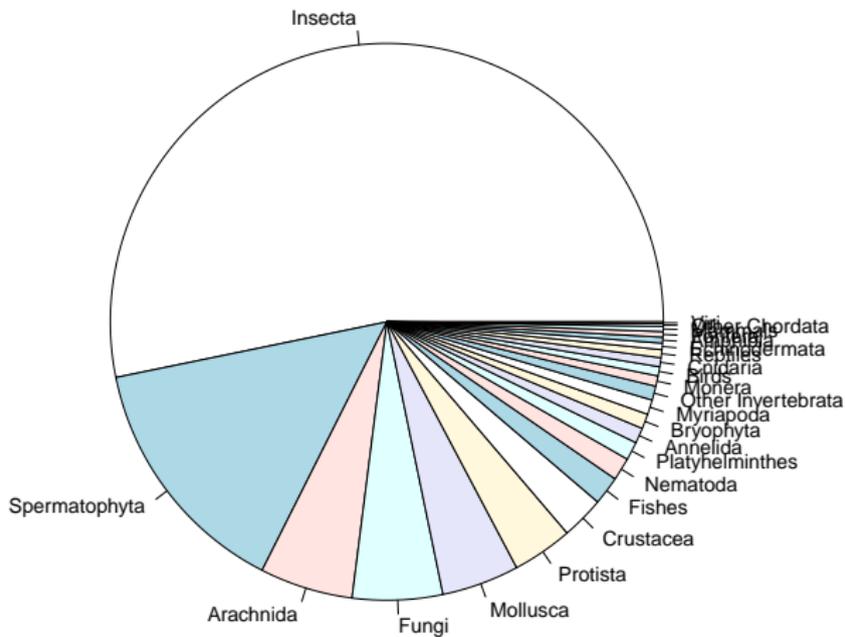
Most important groups



Overview



How many species?



List of “biogeographically important” groups

- ▶ Animalia
 - ▶ Chordata
 - ▶ Arthropoda
 - ▶ Mollusca
 - ▶ *Annelida*
 - ▶ *Nemertea*
 - ▶ *Platyhelminthes*: flatworms
 - ▶ *Cnidaria*: corals, jellyfish etc.
- ▶ Vegetabilia
 - ▶ *Bryophyta*: mosses
 - ▶ Pteridophyta: ferns
 - ▶ Spermatophyta: seed plants
- ▶ Protista
 - ▶ Ascomycota: lichens, molds, yeasts
 - ▶ Basidiomycota: mushrooms and other fungi
 - ▶ *Chromophyta*: brown algae
 - ▶ *Rhodophyta*: red algae
 - ▶ *Chlorophyta*: green algae



Taxonomy

Animalia, animals



Deuterostomia, Ecdysozoa, Lophotrochozoa

- ▶ Three main crown branches of animals, every branch has one group dominated the terrestrial ecosystems
- ▶ Smaller groups inhabit the sea



Taxonomy

Deuterostomia: Phylum Chordata



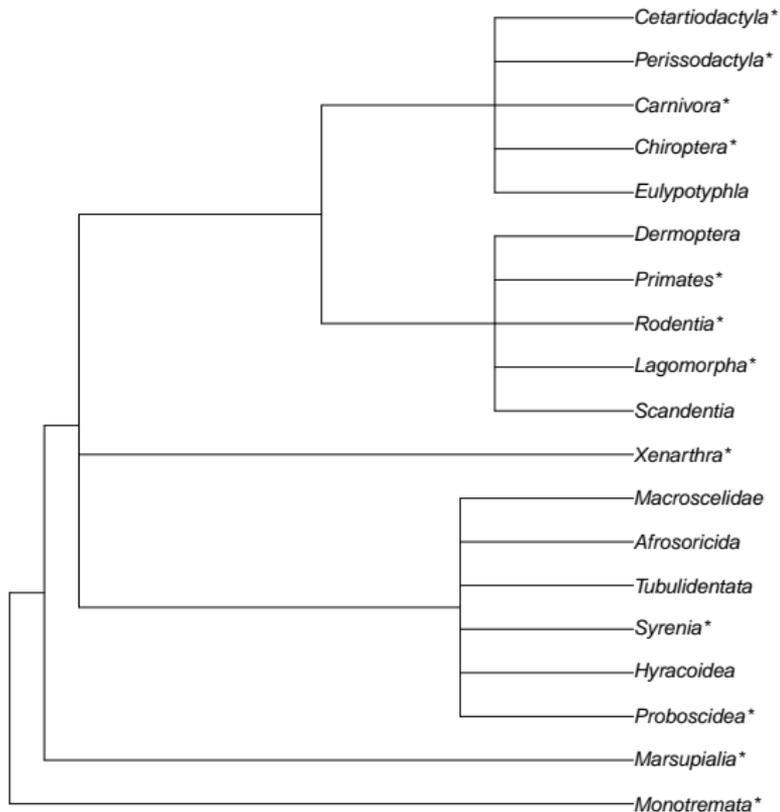
Chordata

Subphylum Vertebrata

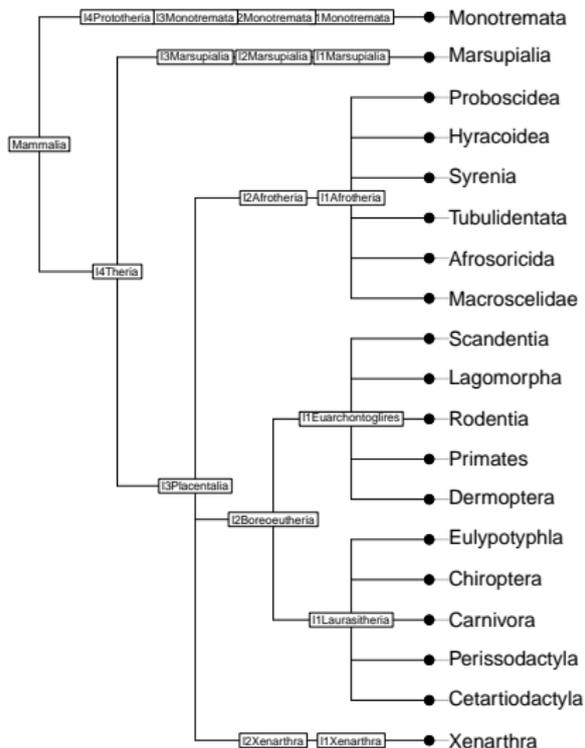
- ▶ *Cyclostomata*
- ▶ *Chondrichthyes*
- ▶ *Actinopterygii*
- ▶ *Dipnoi*
- ▶ Amphibia
- ▶ Reptilia
- ▶ Aves
- ▶ Mammalia



Mammals (simple tree, *groups which we discussed)



Mammals (tree with names of subgroups)



Comments to orders

- ▶ Monotremata*: platypus and echidna; Australia and New Guinea, lay eggs
- ▶ Marsupialia*: pouch mammals, no placenta; Australia and (initially) South America
- ▶ Proboscidea*: elephants
- ▶ Syrenia*: sea cows
- ▶ Xenarthra*: “strangely constructed”: South American anteater, sloth and armadillo
- ▶ Lagomorpha*: hares and rabbits
- ▶ Rodentia*: mice, rats, squirrels etc.
- ▶ Primates*: lemurs, apes and humans
- ▶ Chiroptera*: bats
- ▶ Carnivora*: cats, dogs, bears, seals, sea lions, walruses
- ▶ Perissodactyla*: rhinos, tapirs, horses
- ▶ Cetartiodactyla*: pigs, whales, dolphins, camels, giraffes, cows, deer



Summary

- ▶ Mammals consists of 19 orders, treated now in 5 superorders.



For Further Reading



A. Shipunov.

Biogeography [Electronic resource].

2014—onwards.

Mode of access:

http://ashipunov.info/shipunov/school/biol_330



Mammals

<http://en.wikipedia.org/wiki/Mammal>

