

Biogeography. Lecture 29

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Outline

Biogeography of the World

Biogeography of South America, or Neotropics



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Biogeography of South America, or Neotropics





[Southern, tropical, low, new Andes, Amazon and Parana]



South America: 13 biogeographical regions

1. Tropical Central America
2. West Indies
3. Venezuela and Guiana Shield
4. Amazonian Basin
5. Brazilian Northeast
6. Brazilian Plateau
7. Gran Chaco
8. North and Central Andes (Columbia, Ecuador and Peru)
9. Pampas
10. Atacama desert
11. *Galapagos Islands*
12. Patagonia and Juan Fernandez
13. *South American Antarctic Islands*



Regions 1 and 2: Tropical Central America and West Indies

- ▶ Puerto Rico!!! (and also South Florida) belong to Region 2
- ▶ Central America is similar to West Indies. The most pronounced difference is the richer fauna and especially flora: many endemic species, genera (like *Haptanthus*) and even families.
- ▶ Central America served as a bridge for the American flora and fauna. Many temperate groups migrated through Central American mountains to the north or south.



Regions 3 and 4: Venezuela, Guiana Shield and Amazonia

- ▶ Llanos are northern grasslands in South America; they cover the big part of Venezuela
- ▶ Guiana Shield is the famous “lost world” with a high level of endemism in both plant and animal groups
- ▶ **Amazonia** is a geologically new region, speciation processes are just starting there. Nevertheless, the diversity is overwhelming.
- ▶ The most famous plant and animal representatives are:
 - ▶ Victoria regia giant waterlily, chocolate tree (Theobroma cacao) and Brazil nut (Bertholletia excelsa), papaya (Carica papaya) and guarana (Paulinia cupana)
 - ▶ Morpho butterfly, Theraphosa blondi giant birdeater spider, and leafcutter ants (Atta colombica)
 - ▶ Four-eyed (Anableps) and piranha (Hydrolycus) fish
 - ▶ Trumpeter (Psophia) and toucans (Ramphastos) birds
 - ▶ Anteaters like tamandua, tree anteater (Tamandua tetradactyla), American tapir (Tapirus terrestris), giant capybara (Hydrochoerus), specific Platyrrhini monkeys, Desmodus vampire bats and Bradypus sloths.



Summary for South America

- ▶ Low and narrow continent: the wettest of tropical regions
- ▶ Part of Gondwana: many groups which are also distributed in Australia, New Zealand and Africa
- ▶ Isolated for most of Cenozoic: unique groups of plants and animals (e.g., Xenarthra)



For Further Reading



A. Shipunov.

Biogeography [Electronic resource].

2014—onwards.

Mode of access:

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



South America.

http://en.wikipedia.org/wiki/South_America

