

# Biogeography. Lecture 25

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April 27, 2016



# Outline

## Biogeography of the World

### Biogeography of South America, or Neotropics



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# 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*



## Region 10: Atacama desert

- ▶ The driest place on Earth: zero precipitation level
- ▶ Systematically broken by El Niño when cold Humboldt current is deviating from the coast
- ▶ Frequent earthquakes
- ▶ Dense fogs (fog density in “lomas” is sometimes up to 200–300 mm)
- ▶ Extremely rich marine/coastal (e.g., Humboldt’s penguin *Spheniscus humboldtii*), and very poor terrestrial life



## Region 12: Patagonia

- ▶ The southern temperate region with flora similar to Australia and New Zealand (!)
- ▶ Conifer forests (*Araucaria araucana*, *Libocedrus*, *Saxegothaea*) domination
- ▶ In more humid regions, the main dominant is birch-like *Nothofagus* (same genus as in New Zealand)
- ▶ Many giant Patagonian animals (like giant xenarthran *Megatherium* and *Glyptodon*) are now extinct



# 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](http://ashipunov.info/shipunov/school/biol_330)

