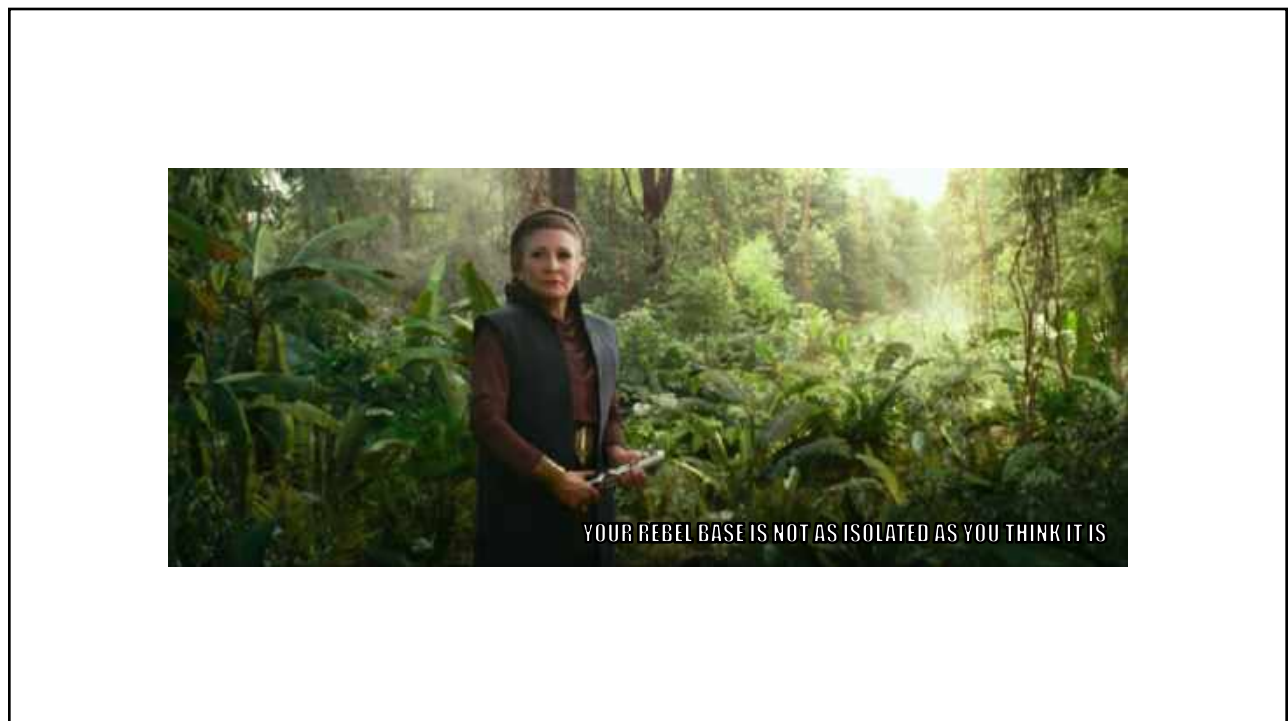
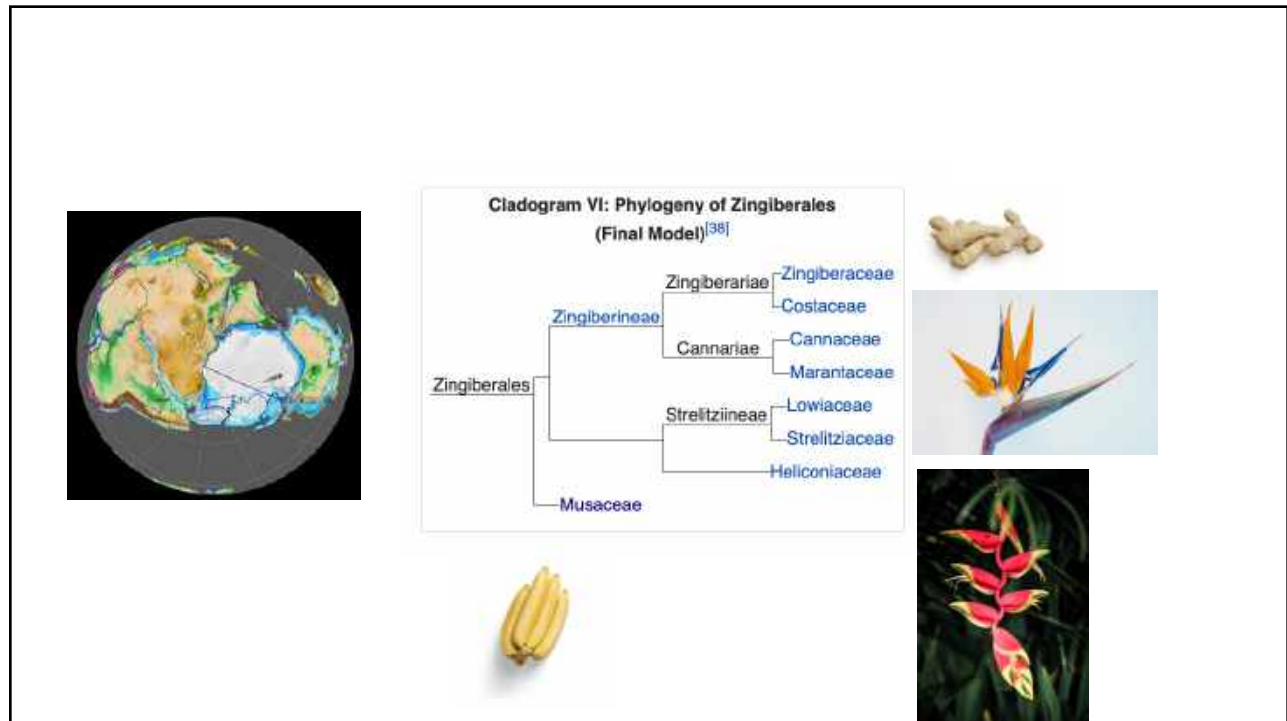


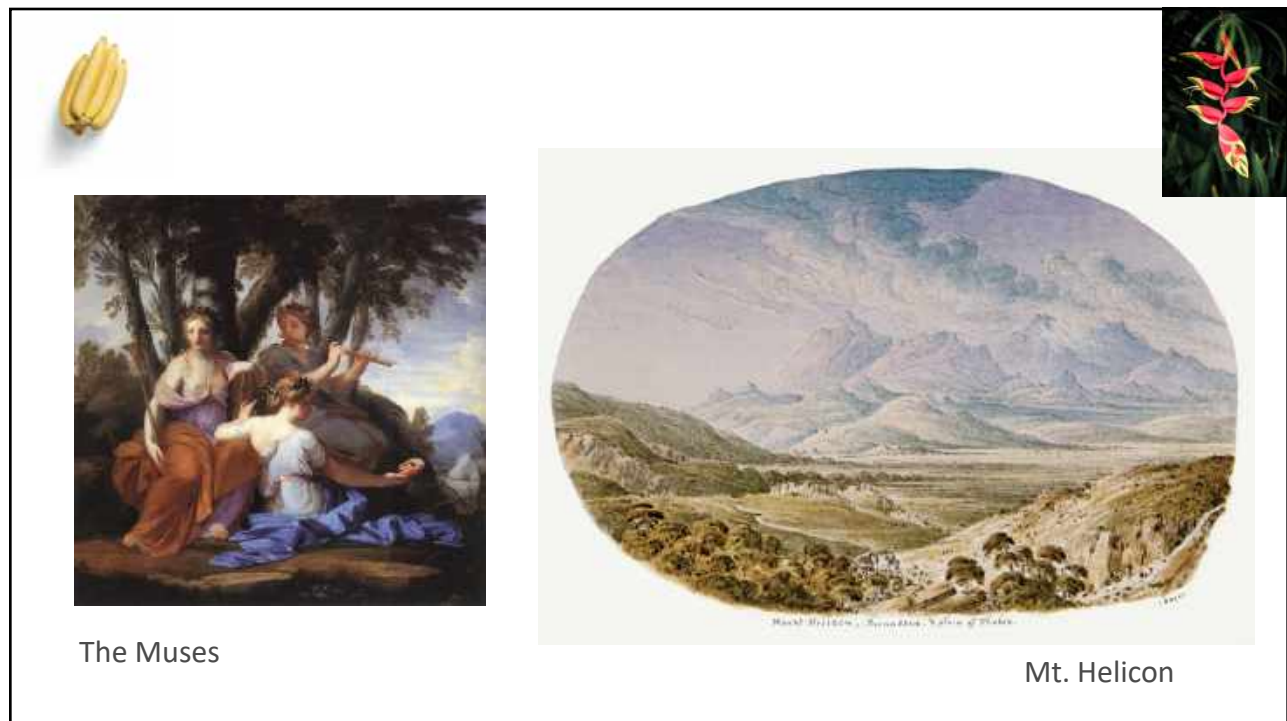
1



2



3



4



5



6

**12%** of Earth's land surface  
**50%** of Terrestrial Biodiversity

7

How many species are  
there on Earth?

8



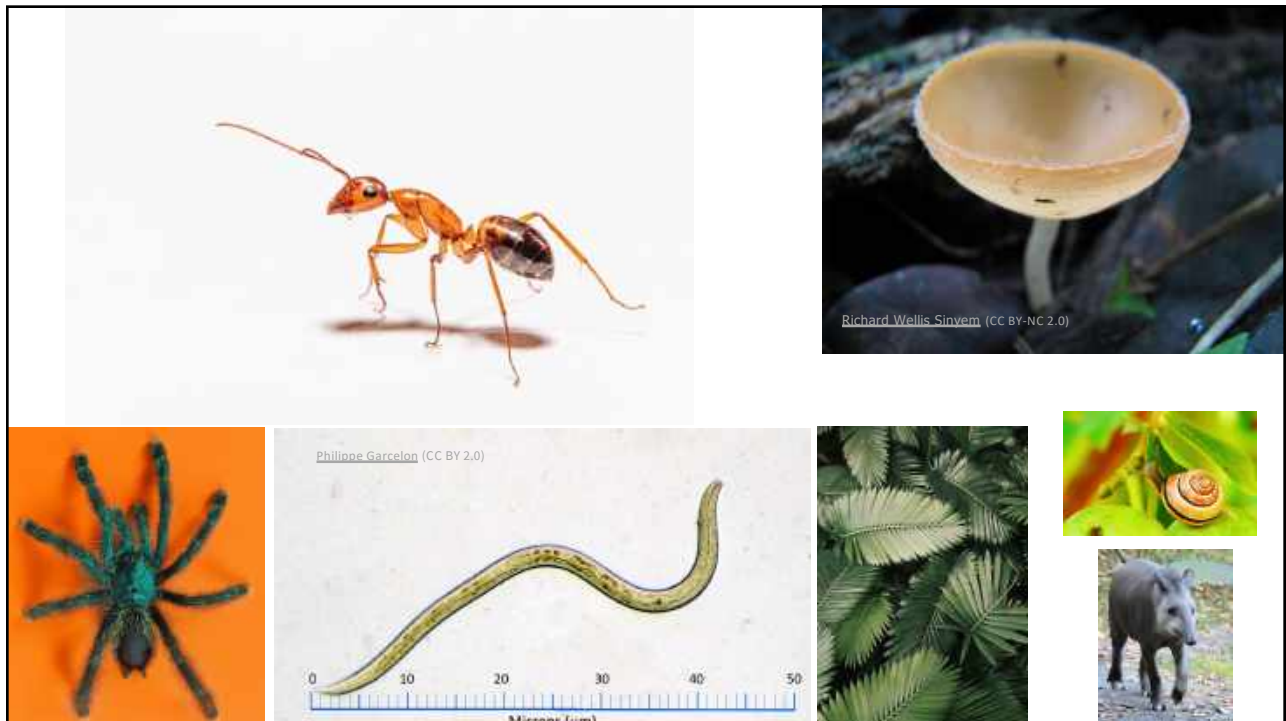
**8.7 million  $\pm$  1.3 million SE**  
(2.2 million  $\pm$  0.18 million SE of these are marine)  
*Mora et al 2011 Plos Bio*

9

What are they?

10

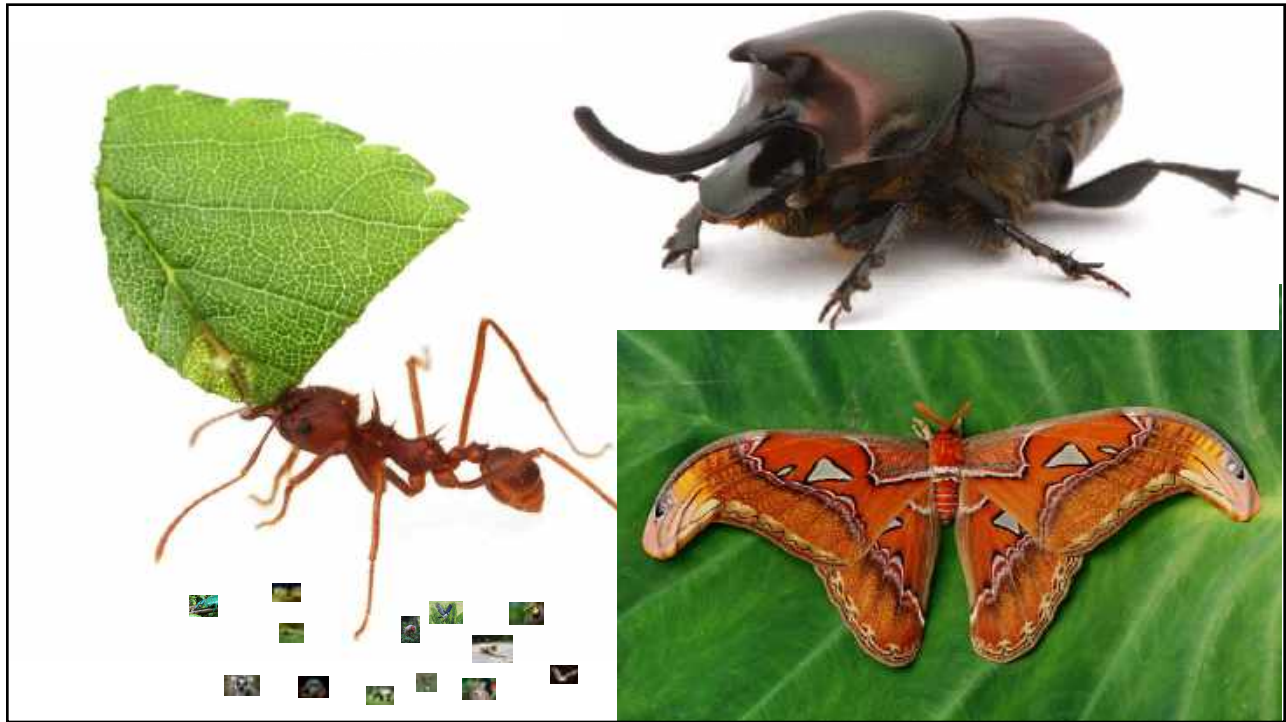




11




12




13

*Where are they?*

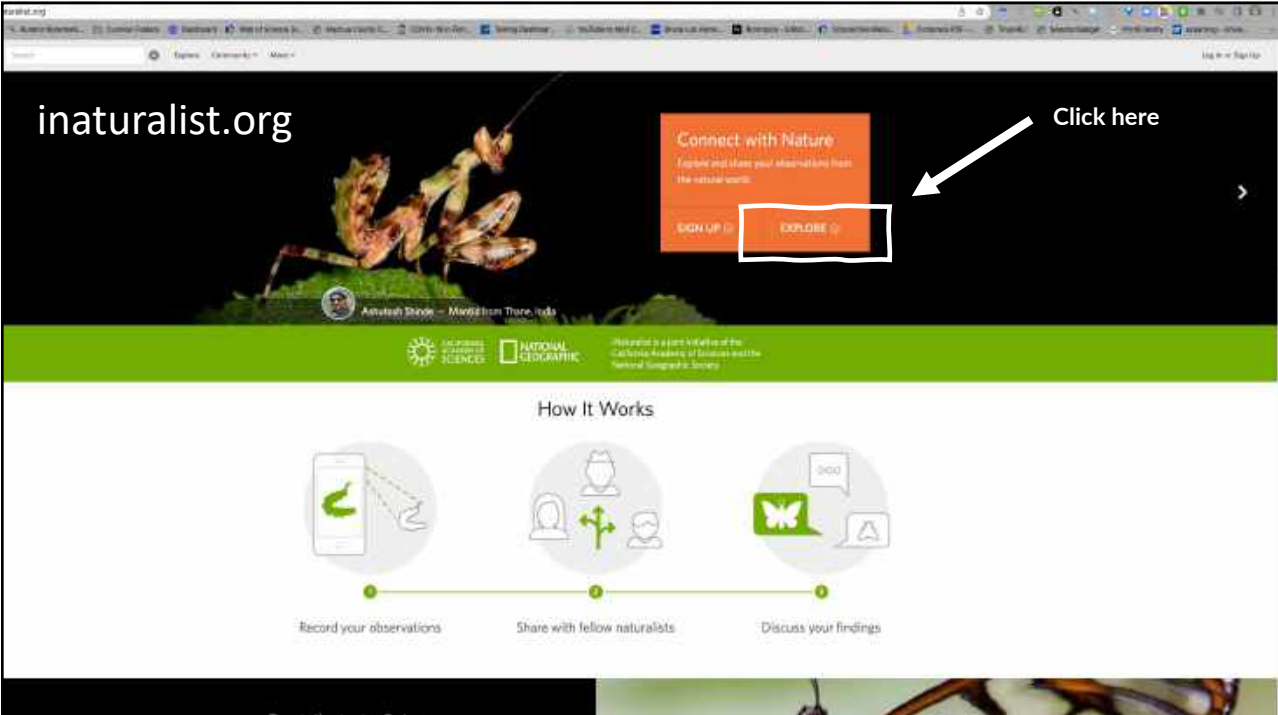
14



 <https://www.inaturalist.org/>

- Yukon Territory, CAN (186,272 mi<sup>2</sup>)
- North Dakota, USA (70,704 mi<sup>2</sup>)
- Ohio, USA (44,825 mi<sup>2</sup>)
- Florida, USA (65,758 mi<sup>2</sup>)
- Puebla, MEX (13,224 mi<sup>2</sup>)
- Honduras (43,433 mi<sup>2</sup>)
- Ecuador (109,483 mi<sup>2</sup>)
- Rondônia, BRA (91,729 mi<sup>2</sup>)
- Rio de Janeiro, BRA (16,871.2 sq mi)
- Uruguay (68,037 mi<sup>2</sup>)

15



inaturalist.org

Connect with Nature  
Explore and share your observations from the natural world.

SIGN UP EXPLORE

Click here

How It Works

Record your observations

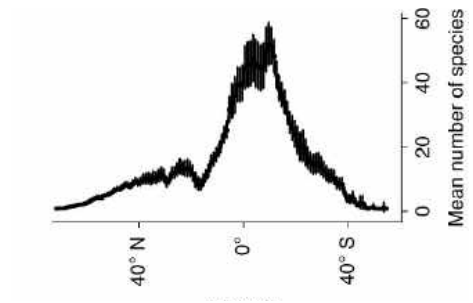
Share with fellow naturalists

Discuss your findings

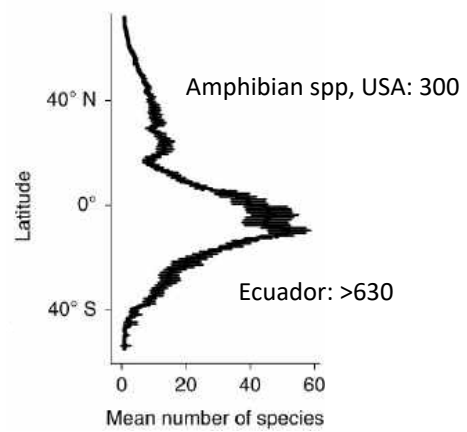
16



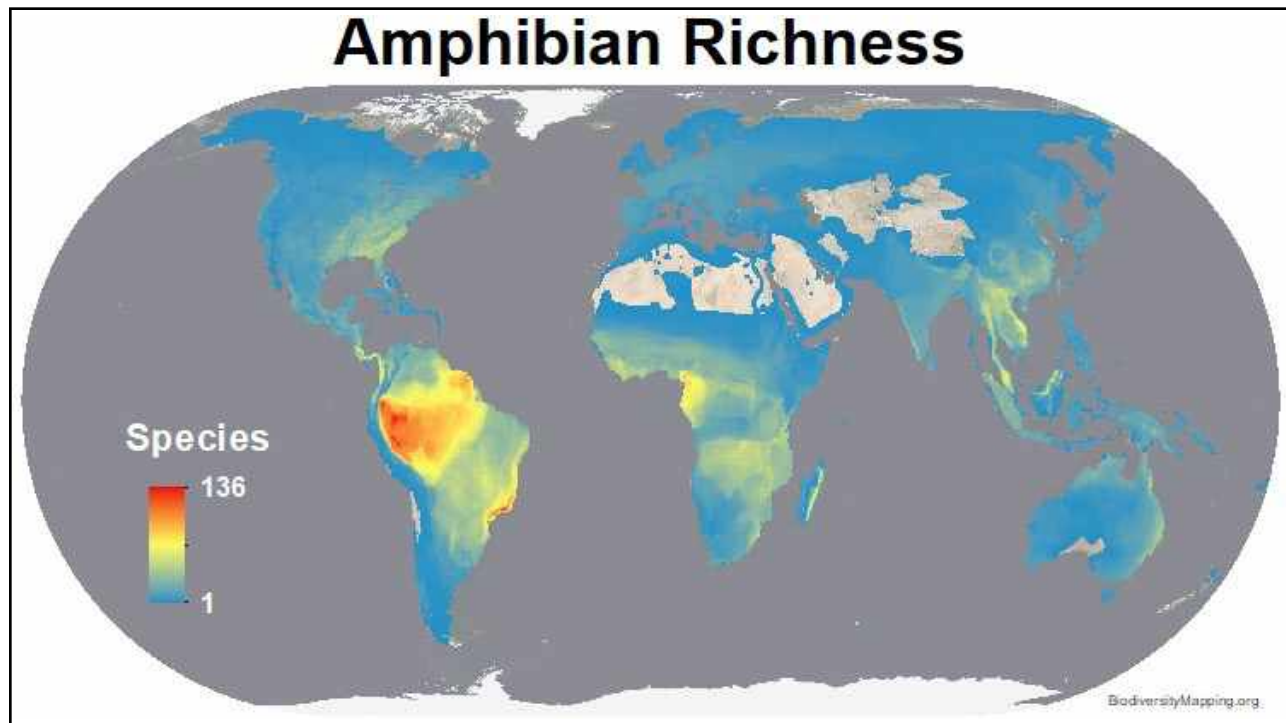




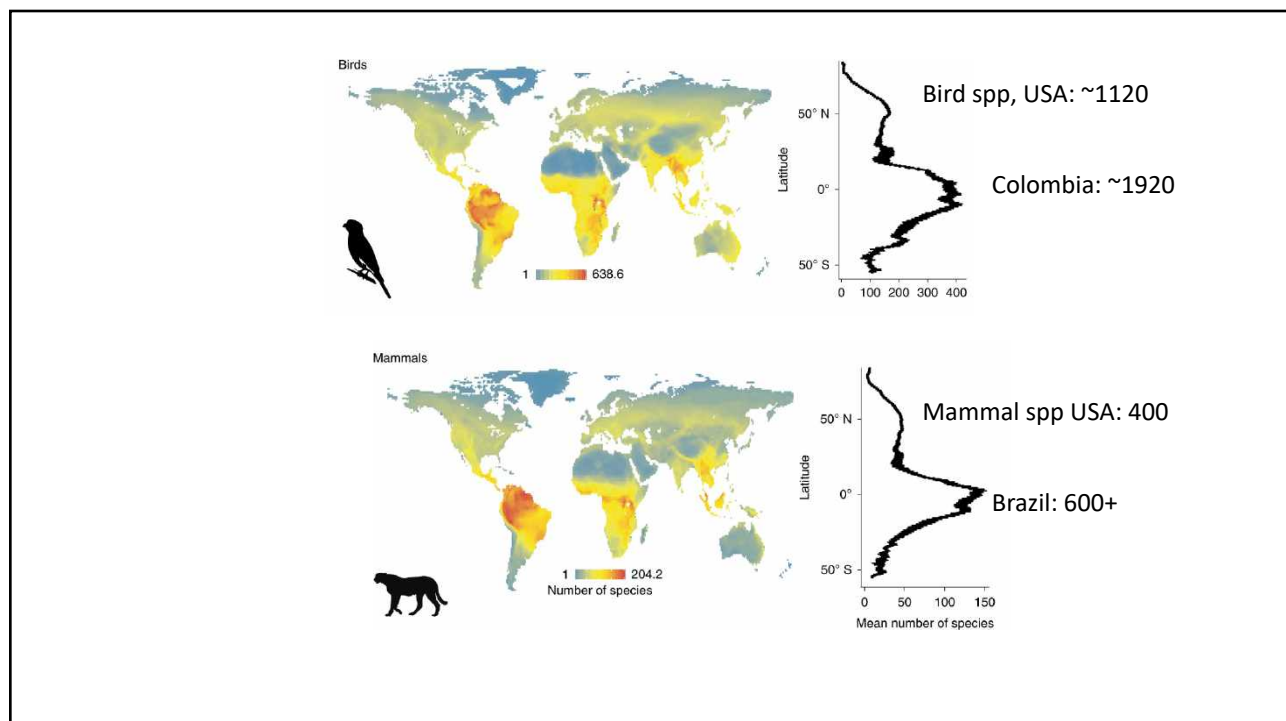
19



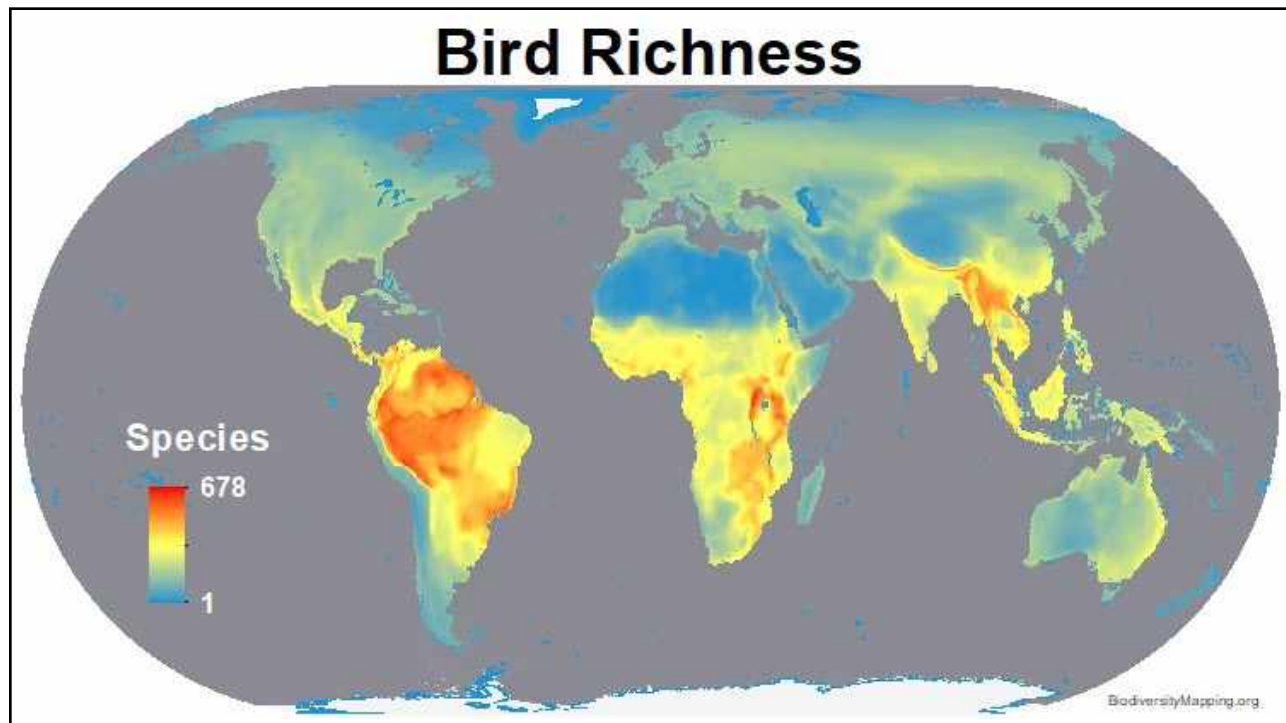
20



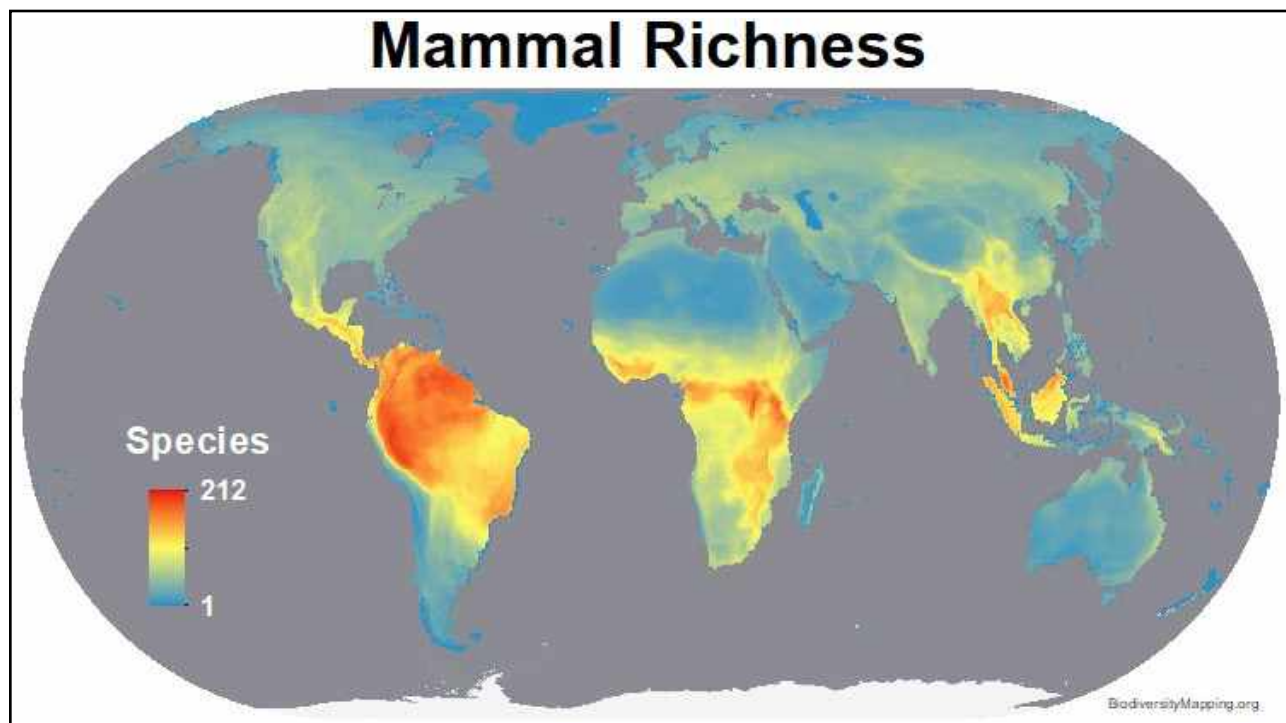
21



22



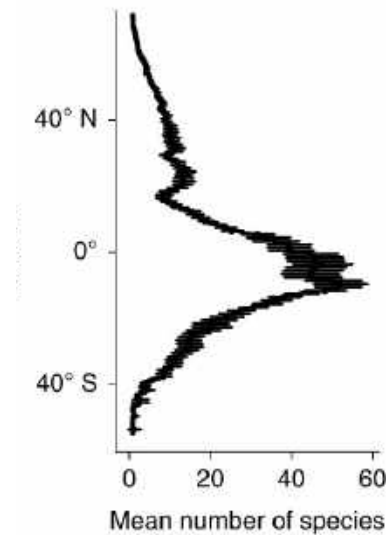
23



24

Fundamental Biodiversity Pattern #1:

# Latitudinal Diversity Gradient



25

Fundamental Biodiversity Pattern #2:

# (after the break)

26