# References

## What is macroecology?

#### General

- Brown. 1995. Macroecology. University of Chicago Press. [book]
- Gaston & Blackburn. 2000. Pattern and process in macroecology. Blackwell Science. [book]
- MacArthur and Wilson. 1967. The theory of island biogeography. Princeton University Press.
- Rosenzweig.1995. Species diversity in space and time. Cambridge: Cambridge University Press. [book]
- Wilson.1992. The diversity of life. New York: Norton. [book]
- Keith et al. 2012. What is macroecology. Biology Letters meeting report\*

#### History

- Wallace.1863. On the physical geography of the Malay Archipelago. Journal of the Royal Geographical Society London, 33: 217-234.
- Brown & Maurer. 1989. Macroecology: the division of food and space among species on continents. Science, 243: 1145-1150.

## Classic Macroecological Patterns

- Arrhenius. 1921. Species and area. Journal of Ecology, 9: 95-99.
- Willis.1922. Age and Area. Cambridge University Press.
- Brown and Nicoletto. 1991. Spatial scaling of the species composition body masses of North-American land mammals. The American Naturalist, 138:1478-1512.
- Hutchinson and MacArthur. 1959. A theoretical ecological model of size distributions among species of animals. The American Naturalist, 93:117-125.
- Damuth. 1981. Population density and body size in mammals. Nature, 290: 699-700.
- Brown. 1984. On the relationship between abundance and distribution of species. The American Naturalist, 124:255-279.
- Meiri & Dayan. 2003. On the validity of Bergmann's rule. Journal of Biogeography, 30: 331-351. \*

#### Macroecological "rules"

- Bergmann. 1847. Ueber die verhältnisse der wärmeökonomie der thiere zu ihrer grösse. Gottinger studien. 3:595-708.
- McNab.1971. On the ecological significance of Bergmann's rule. Ecology, 52:845-854.
- Geist. 1987. Bergmann's rule is invalid. Canadian Journal of Zoology, 65:1035-1038.
- Ashton et al. 2000. Is Bergmann's rule valid for mammals? American Naturalist, 156:390-415.
- Blackburn et al. 1999. Geographic gradients in body size: a clarification of Bergmann's rule. Diversity and Distributions, 5:165-174.
- Allen. 1877. The influence of physical conditions in the genesis of species. Radical Review, 1:108–140.
- Rapoport. 1982. Areography: geographical strategies of species. Pergamon, New York.
- Stevens. 1989. The latitudinal gradient in geographical range: how so many species coexist in the tropics. American Naturalist, 133:240-256.
- Gloger. 1833. Das Aba"ndern der Vo"gel durch Einfluss des Klimas. August Schulz, Breslau, Germany.

## Latitudinal diversity gradients and hotspots

- Grenyer et al. 2006. Global distribution and conservation of rare and threatened vertebrates. Nature, 444:93-96.
- Willig et al. 2003. Latitudinal gradients of biodiversity: pattern, process, scale, and synthesis. Annual Reviews in Ecology Evolution and Systematics, 34: 273-309.
- Rohde. 1992. Latitudinal gradients in species diversity: the search for the primary cause. Oikos, 65: 514-527.
- Weir and Schluter. 2007. The latitudinal gradient in recent speciation and extinction rates of birds and mammals. Science, 315: 1574-1576.
- Jablonksi et al. 2006. Out of the tropics: evolutionary dynamics of the latitudinal diversity gradient. Science, 314: 102-106.
- Mittelbach et al. 2007. Evolution and the latitudinal diversity gradient: speciation, extinction and biogeography. Ecology Letters, 10: 315-331.\*
- Schemske 2009. Is there a latitudinal gradient in the importance of biotic interactions? Annual Reviews in Ecology, Evolution and Systematics, 40: 245-269. \*

#### **Biases**

- Glaw et al. 2012. Rivaling the world's smallest reptiles: discovery of miniaturized and microendemic new species of leaf chameleons (Brookesia) from northern Madagascar. PLoS ONE, 7: e31314.
- Isaac et al. 2004. Taxonomic inflation: its influence on macroecology and conservation. TREE, 19:464-469.

## Modern Macroecology

- Han et al. 2016. Global patterns of zoonotic disease in mammals. Trends in Parasitology, 32:565-577.
- Stephens et al. 2016. The macroecology of infectious diseases: a new perspective on global-scale drivers of pathogen distributions and impacts. Ecology Letters, 19:1159-1171.\*
- Newbold et al. 2016. Has land use pushed terrestrial biodiversity beyond the planetary boundary? A global assessment. Science, 353:288-291.
- Newbold et al. 2015. Global effects of land use on local terrestrial biodiversity. Nature, 520:45-50.
- Harfoot et al. 2014. Emergent global patterns of ecosystem structure and function from a mechanistic general ecosystem model. PLoS Biology, 12:e1001841.

## What is macroevolution?

#### General

Simpson 1944. Tempo and Mode in Evolution. [book] Stanley. 1979. Macroevolution, Pattern and Process. [book]

## Cited in the lecture

- Benson, R.B.J., et al. 2014. Rates of dinosaur body mass evolution indicate 170 million years of sustained ecological innovation on the Avian stem lineage. PLoS Biology, 12.
- Cooney, C. et al 2017. Mega-evolutionary dynamics of the adaptive radiation of birds. Nature. online. doi:10.1038/nature21074.
- Erwin D.H. 2000. Macroevolution is more than repeated rounds of microevolution. Evol Dev. 2:78-84.

- Fritz, Susanne A., et al. 2013. Diversity in time and space: wanted dead and alive. Trends in Ecology & Evolution 28: 509-516.
- Givnish, T.J. et al. 2015. Orchid phylogenomics and multiple drivers of their extraordinary diversification. Proc. R. Soc. B 2015 282 20151553.
- Haldane, J.B.S. 1949. Suggestions as to quantitative measurement of rates of evolution. Evolution, 51-56.
- $\bullet\,$  Jablonksi 2008. Species Selection: Theory and Data. Annual Reviews Ecology Evolution and Systematics.  $39{:}501{-}24$
- $\bullet\,$  Jones, F.C. et al. 2012. The genomic basis of adaptive evolution in threespine sticklebacks. Nature 484, 55–61.
- Okasha, S. 2006. Evolution and the Levels of Selection. [book]
- Raup, D.M., & Sepkoski, J.J. 1982. Mass Extinctions in the Marine Fossil Record. Science, 215: 1501-1503.