

# Biogeography. Lecture 22

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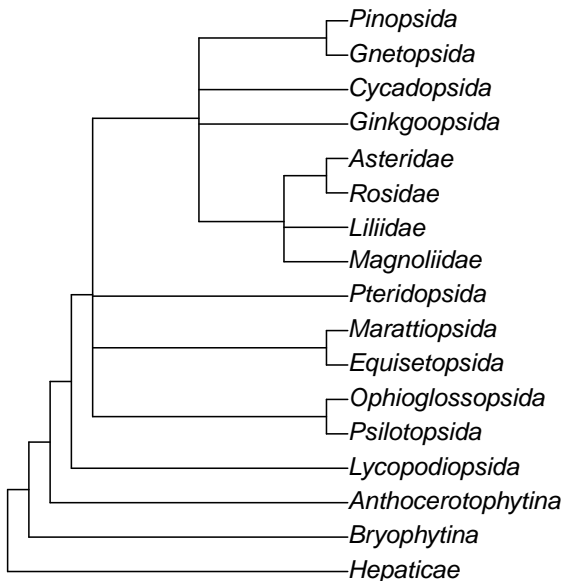
March 31, 2014



# Plants: Vegetabilia kingdom

## Short overview





# Magnoliidae: vesselless *Hedyosmum*



## Liliidae: seagrass *Syringodium*



And also Araceae, Bromeliaceae, Palmae, Orchidaceae, grasses, gingers etc.



# Rosidae: white mangrove *Laguncularia*



## Asteridae: green flowering shrub *Rhytidophyllum*



Gesneriaceae and other groups with fused petals



# Biogeography of the World

## Distribution: the basic concept





# Species distribution

- ▶ Range

Restricted with climate, history and natural barriers

- ▶ Disjunction

Examples: East Asia/East Coast; Pacific (West Washington/North Idaho)

- ▶ Endemics

Every species is endemic to some region. What is important, is the size of region. There also species endemic only to Earth: cosmopolitan species like bracken fern (*Pteridium*).

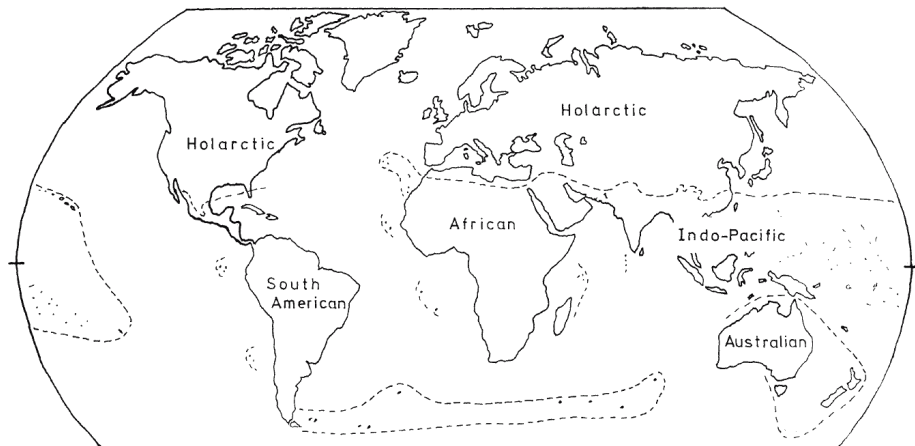


# Biogeography of the World

## Floristic kingdoms and faunistic provinces



# Contemporary look on plant biogeography: five kingdoms (Cox, 2001)



# Contemporary look on animal biogeography: 10 provinces (Holt et al., 2013)



# Our approach: 5 regions

- ▶ Holarctic (I and II)
- ▶ Neotropical
- ▶ African and Madagascan
- ▶ Indo-Pacific
- ▶ Australian

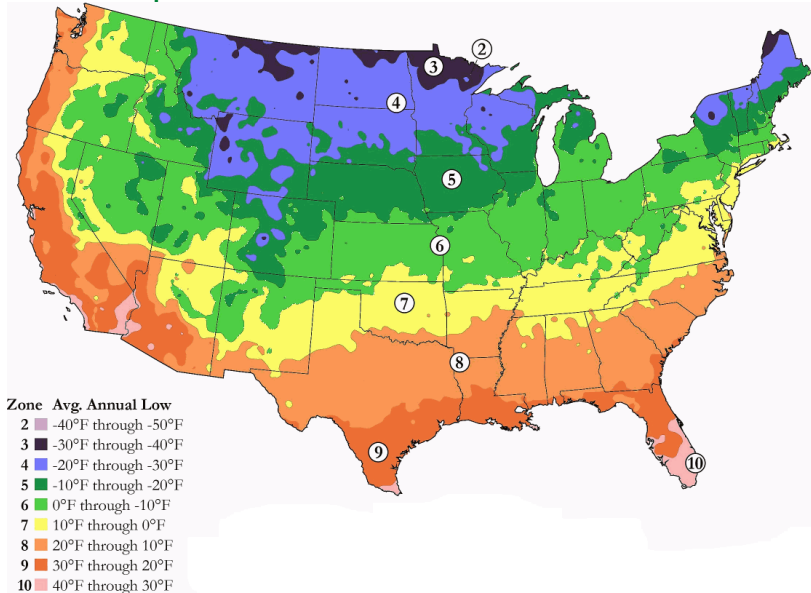


# Biogeography of the World

## Holarctic region I: Nearctic North America



# Climate/temperatures: hardiness zones



# Climate/precipitation





# Ecoregions



# 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)



I. Sanderson.

*The Continent We Live On.*

1961.

Mode of access: <http://www.biodiversitylibrary.org/item/71734#page/7/mode/1up>



North America.

[http://en.wikipedia.org/wiki/North\\_America](http://en.wikipedia.org/wiki/North_America)

