

Biogeography. Lecture 17

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Outline

Taxonomy

Plants: Vegetabilia kingdom

Biogeography of the World

Distribution: the basic concept

Floristic kingdoms and faunistic provinces

Holarctic region I: Nearctic North America



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Taxonomy

- Plants: Vegetabilia kingdom

Biogeography of the World

- Distribution: the basic concept

- Floristic kingdoms and faunistic provinces

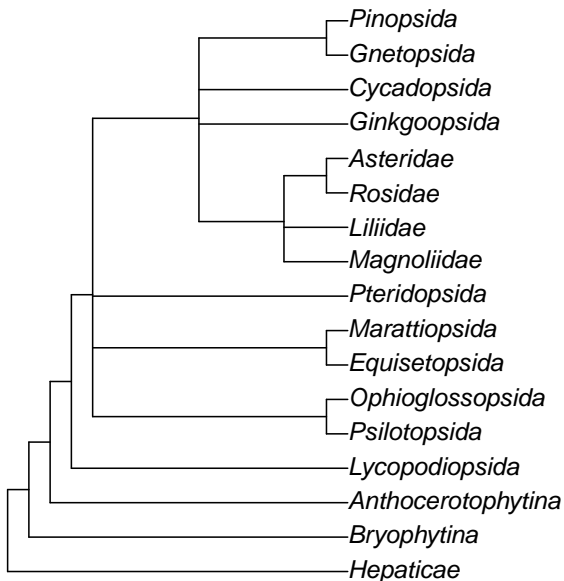
- Holarctic region I: Nearctic North America



Taxonomy

Plants: Vegetabilia kingdom





Magnoliidae: vesselless *Hedyosmum*



Liliidae: seagrass *Syringodium*



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



Rosidae: white mangrove *Laguncularia*



Asteridae: green flowering shrub *Gesneria*



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*).

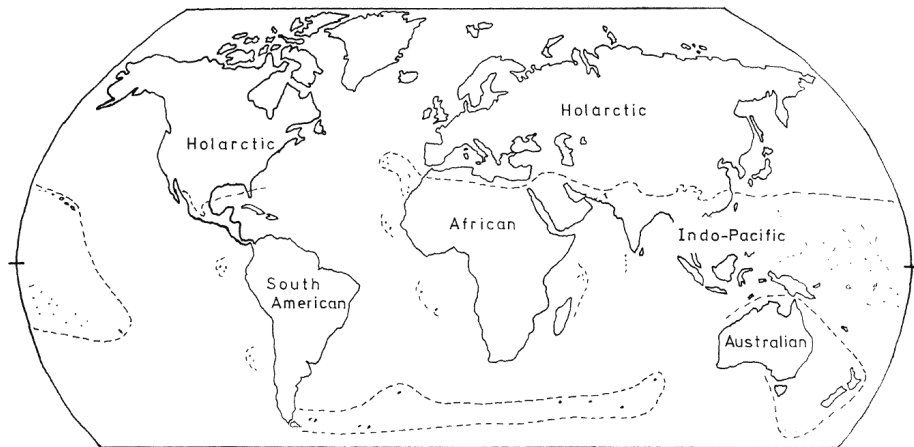


Biogeography of the World

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

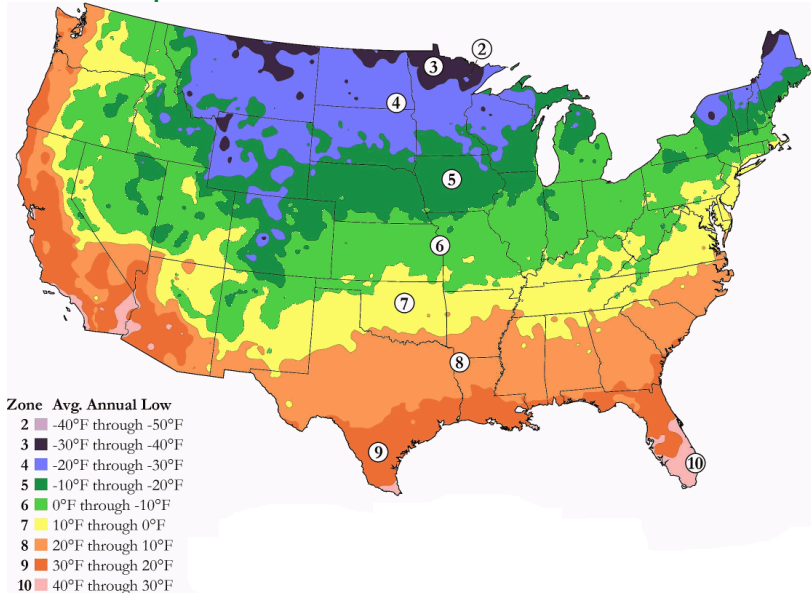


Biogeography of the World

Holarctic region I: Nearctic North America



Climate/temperatures: hardiness zones



Climate/precipitation



For Further Reading



A. Shipunov.

Biogeography [Electronic resource].

2014—onwards.

Mode of access:

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

