

Les communautés de plantes du Sud des Appalaches







APPALACHIAN TRAIL
Sweat Helper Creek Trail 1.7
Boulevard Trail 2.7
Katahdin Maine 1972.0



Old Mountains 480 million years

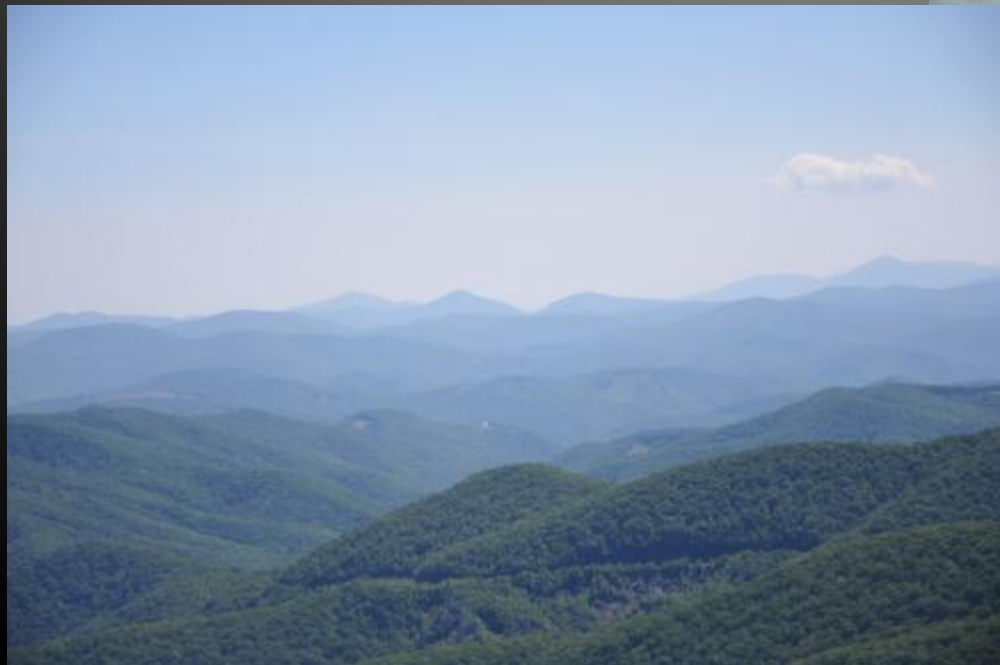
Human beings in Africa : 2.9 million years

Human beings in America : 15000 years



Rocky mountains 45 million years

Daniel Mosquin UBC



Southern Appalachian Mountains



Biological richness and biodiversity

- 2500 species of flowering plants
- 130 species of trees

Mais aussi

- 2300 species of mushrooms
- 30 species of salamanders
- 500 species of mosses
- 400-800 species of arachnids
- 100 species of mollusks
- 230 species of millipedes
- 30 espèces de Trillium



Animals communities







Human beings communities



Our American colleagues







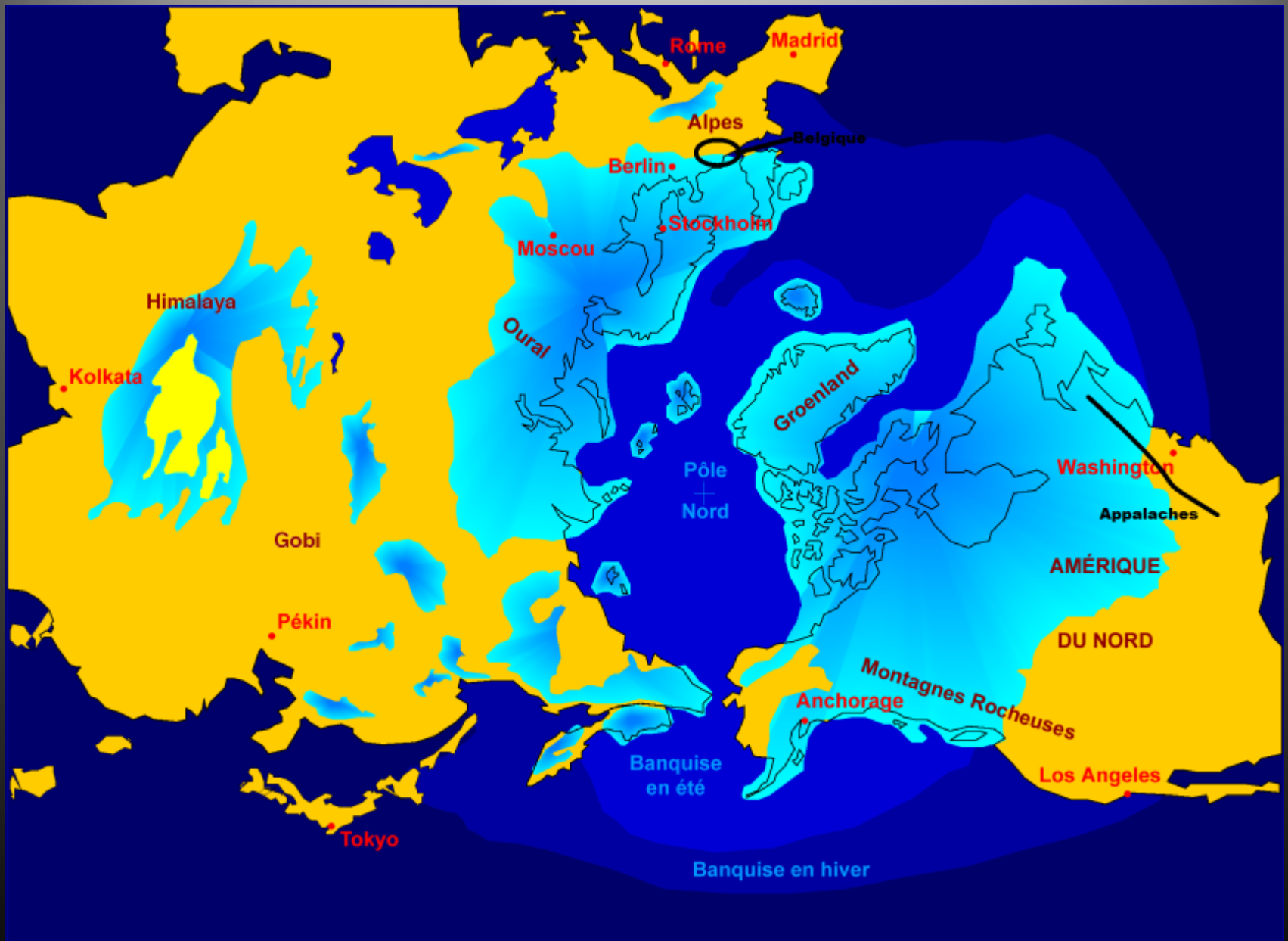
DONALD
JENKINS
1934 - 1976

RESTED IN PEACE

Why is the flora so rich and so diverse

- Favorable geographical and glacial history
- Topography
- Varied geology and pedology
- Good climate: Temperate rain forest (Water and Heat seasonal variation)

Last Ice Age : 15000 years ago





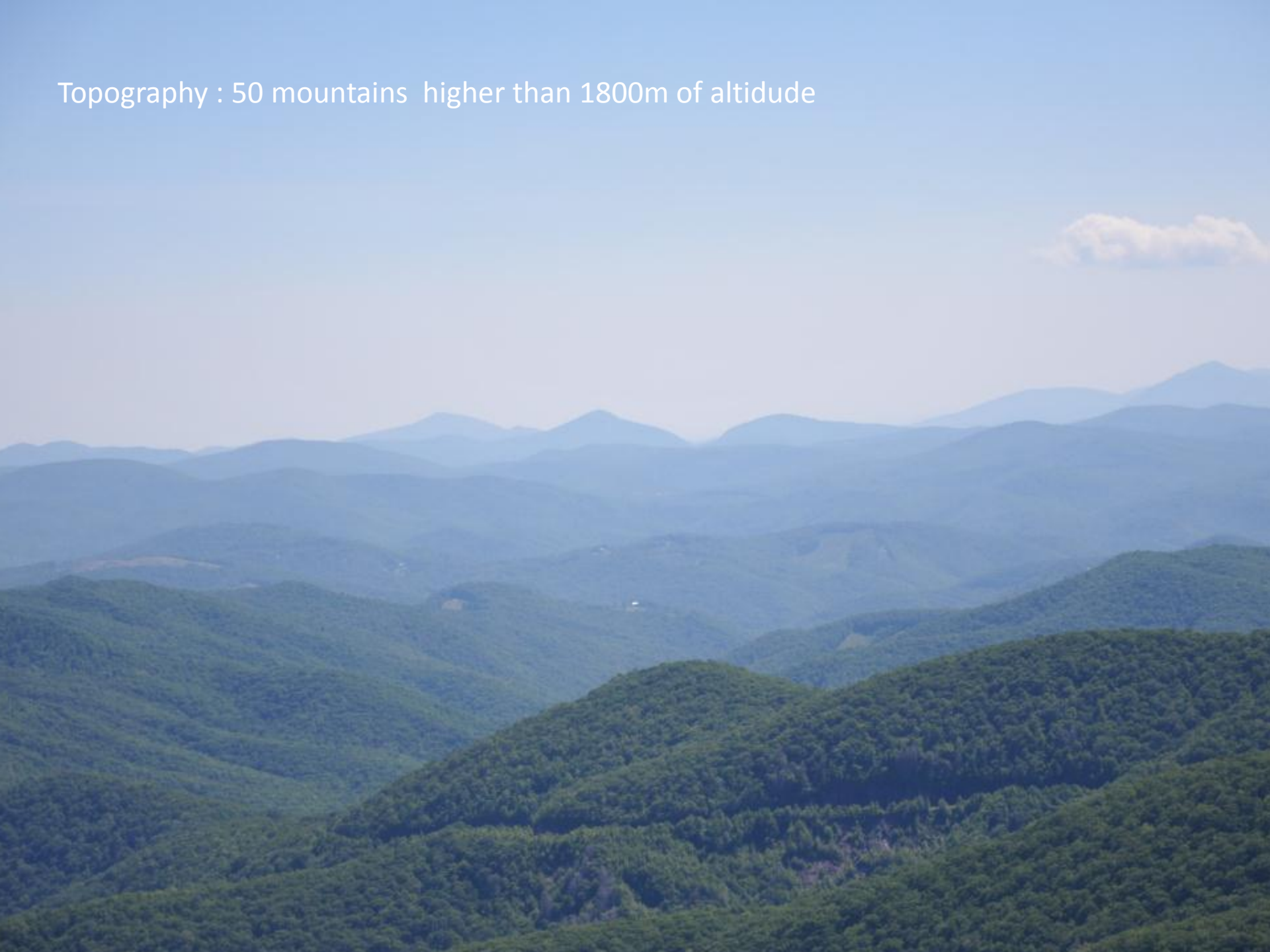
New York 1,5 miles



Why is the flora so rich and so diverse

- Favorable glacial and geographical history
- **Topography**
- Varied geology and pedology variées
- Good climate: Temperate rain forest (Water and Heat)

Topography : 50 mountains higher than 1800m of altitude



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Climat

- Lakemont Georgia
 - 172cm water a year (wespelaar +/- 100 cm)
 - Average temperature in July 30°C
 - Average temperature in January 10°C

Phoenix in Arizona
20cm water a year



HEAT and WATER



HEAT but NO WATER



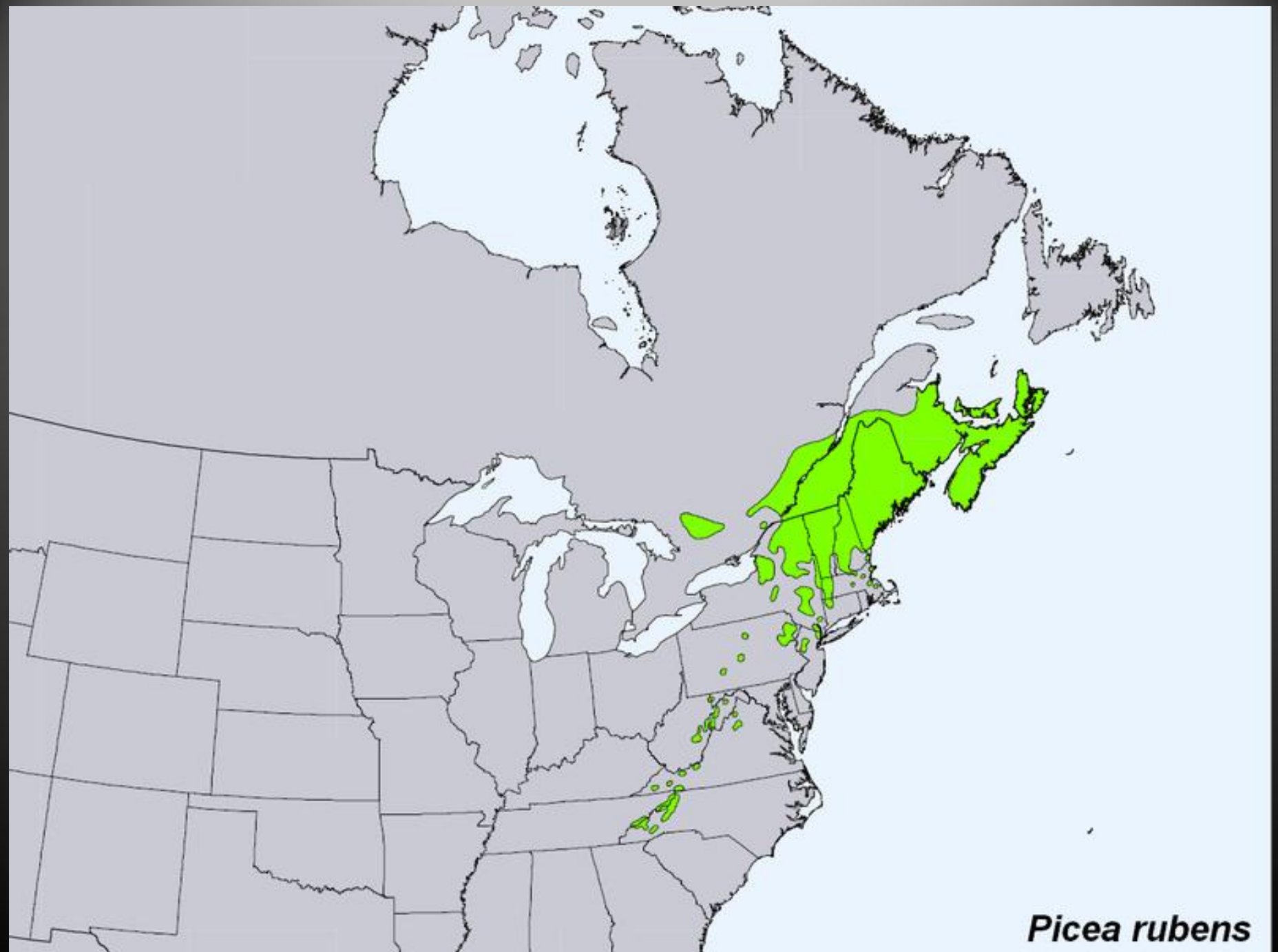
Plant communities

- Spruce Fir forest : Forêt à Picea et Abies
- Grassy Bald : Bald à graminées
- Heath Bald : Bald à plantes de bruyères
- High elevation rock outcrop : Les enrochements de haute altitude
- High elevation red oak forest : La forêt de haute altitude à Quercus rubra
- Rich Cove forest : La 'cove forest' à sol légèrement acide
- Acidic cove : La 'cove forest' à sol très acide
- Spray cliff zone : La zone de falaise humide
- Rocky streamside and river side : Les bords de torrents et rivières
- Mountain bog : Les marais de montagne
- Chestnut Oak forest : La forêt à châtaigner et chêne
- Pine Oak Heath community : La forêt à Pin chêne et bruyère
- Canopy gap community : Les communautés de clairière

Spruce-fir forest
Minimum 5000 ft (1500m)







Picea rubens

Picea rubens





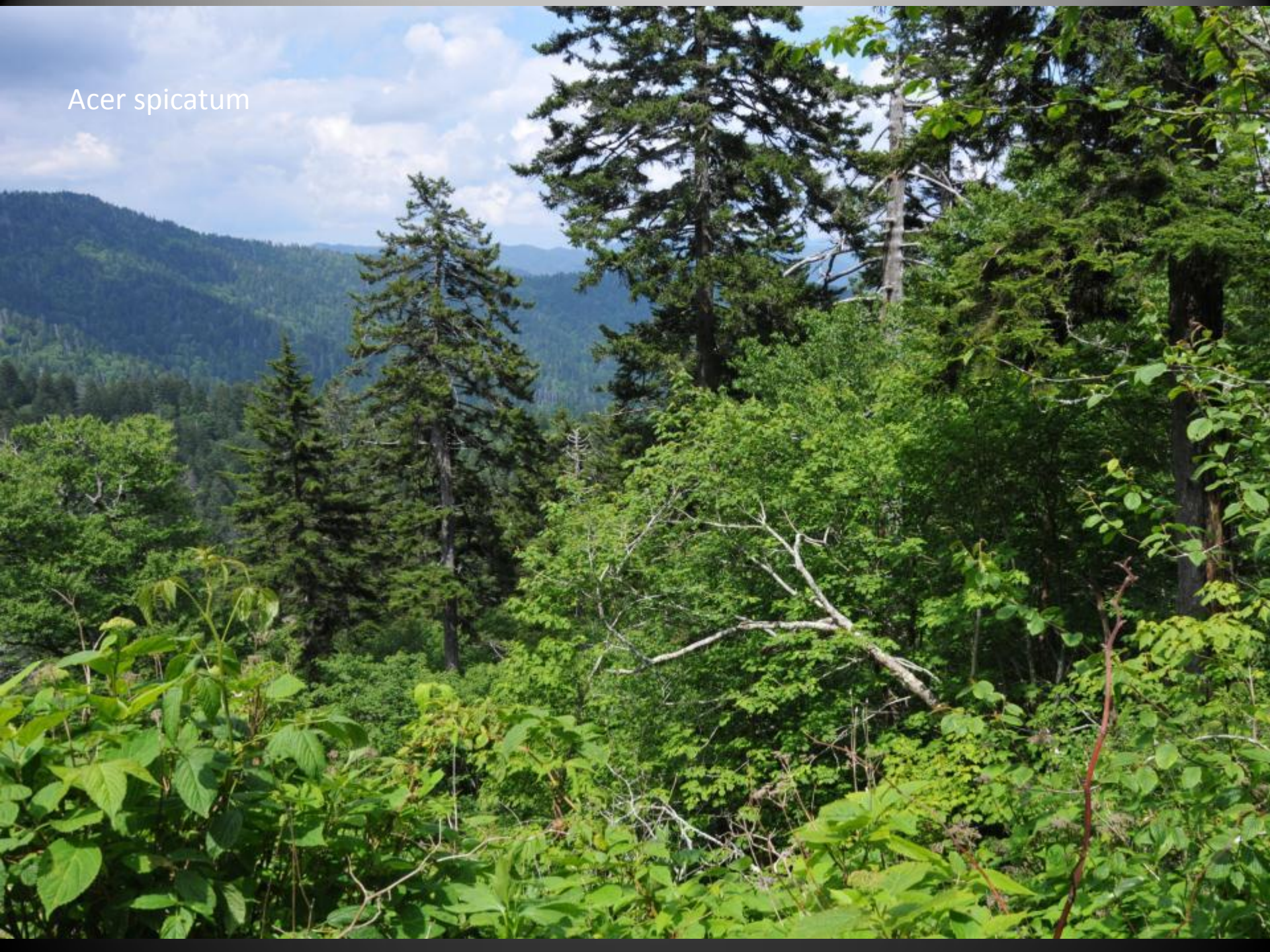
Abies fraseri







Acer spicatum













Betula alleghaniensis







Sorbus americana







Prunus pensylvanica





Aesculus flava

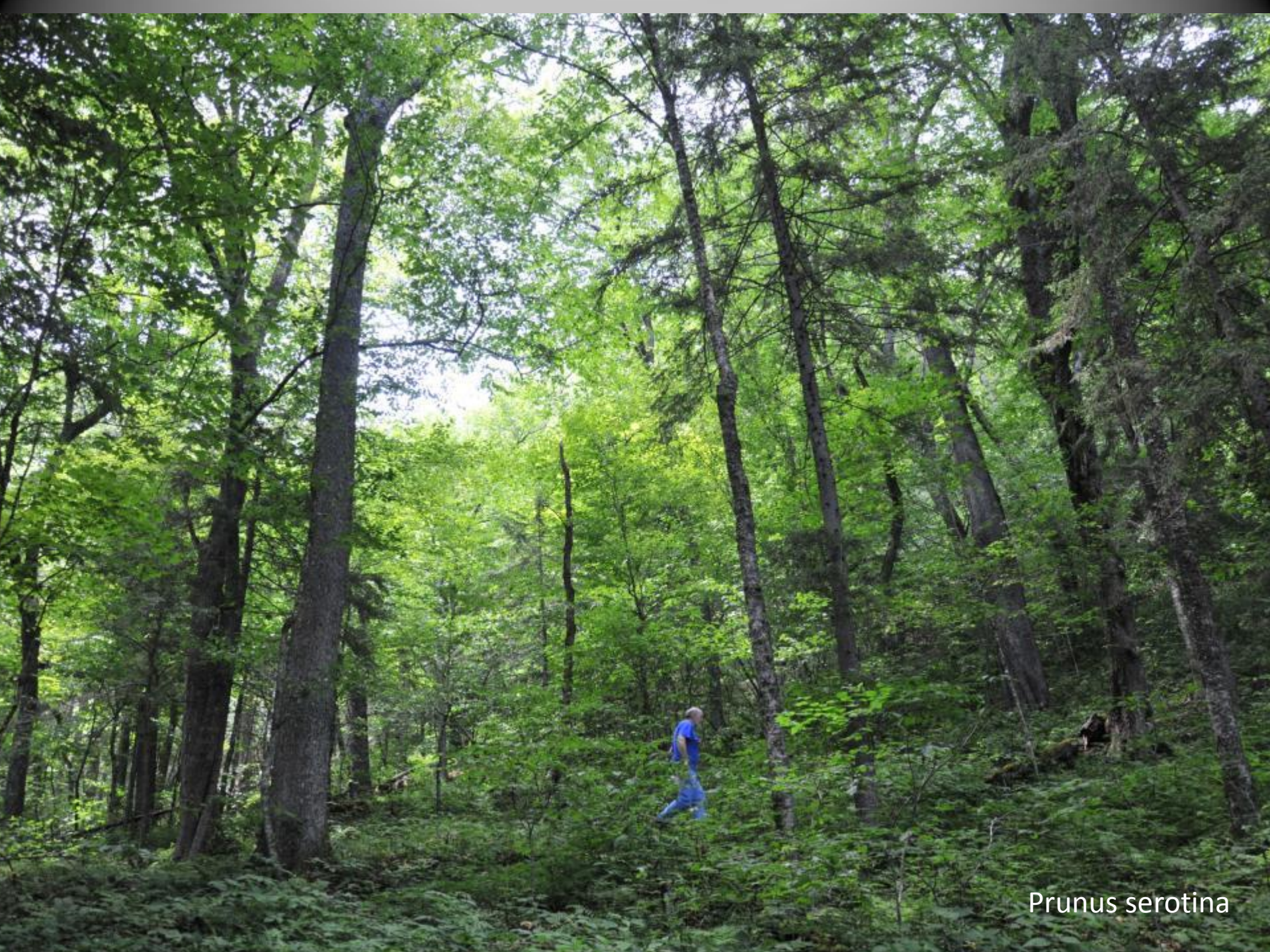




Archilocus colubris







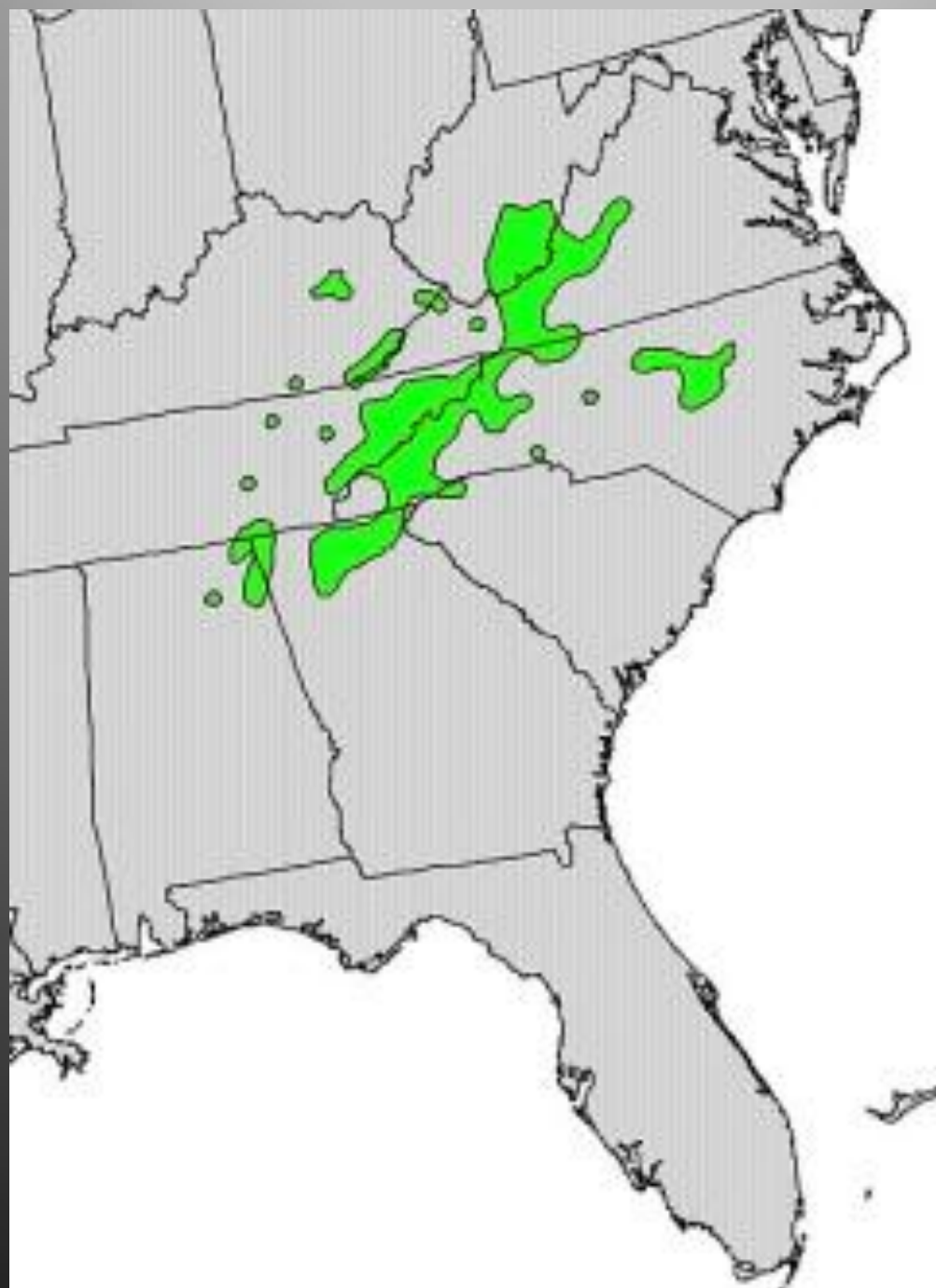
Prunus serotina





Rhododendron catawbiense



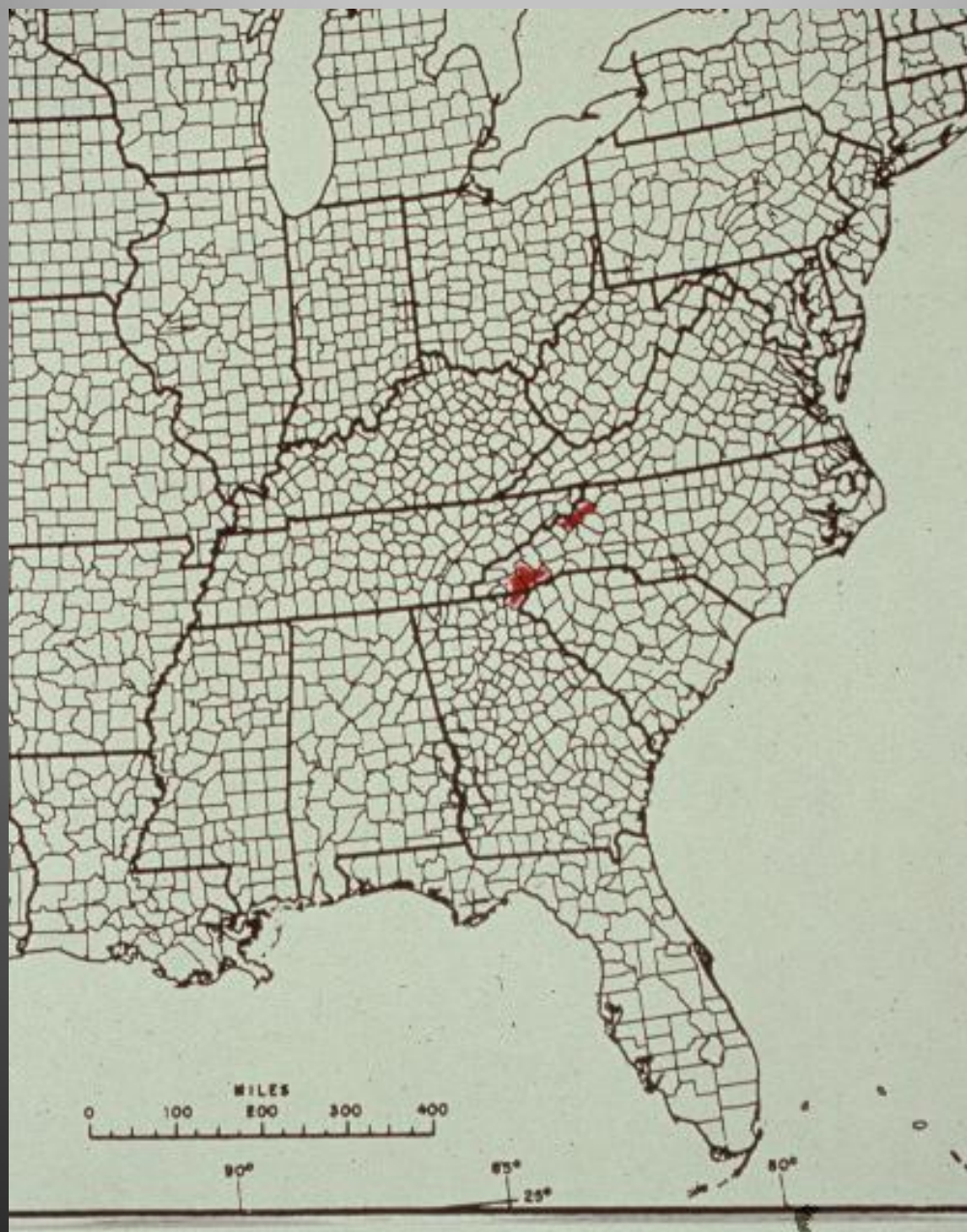




Rhododendron vaseyi







R. vaseyi



Viburnum lantanoides







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SCENIC · ↑

VIEW 500ft

ANDREWS BALD





Rhododendron calendulaceum













Rhododendron catawbiense



Viburnum cassinioides





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Forêt de haute altitude à *Quercus rubra*







Hamamelis virginiana



A photograph of a dense thicket of Kalmia latifolia shrubs growing on a rocky hillside. The shrubs are characterized by their dark green, glossy, elliptical leaves and clusters of small, reddish-brown flowers. The plants are growing in a dense, bushy manner, covering the slope. In the foreground, a large, flat, grey rock surface is visible, showing signs of weathering and lichen. The background is filled with more dense foliage, including trees and other shrubs, creating a lush, green environment. The lighting suggests a sunny day, with bright highlights on the leaves and flowers.

Kalmia latifolia













Menziesia pilosa









Ilex montana



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ACIDIC COVE FOREST



Tsuga canadensis





Tsuga canadensis











Liriodendron tulipifera



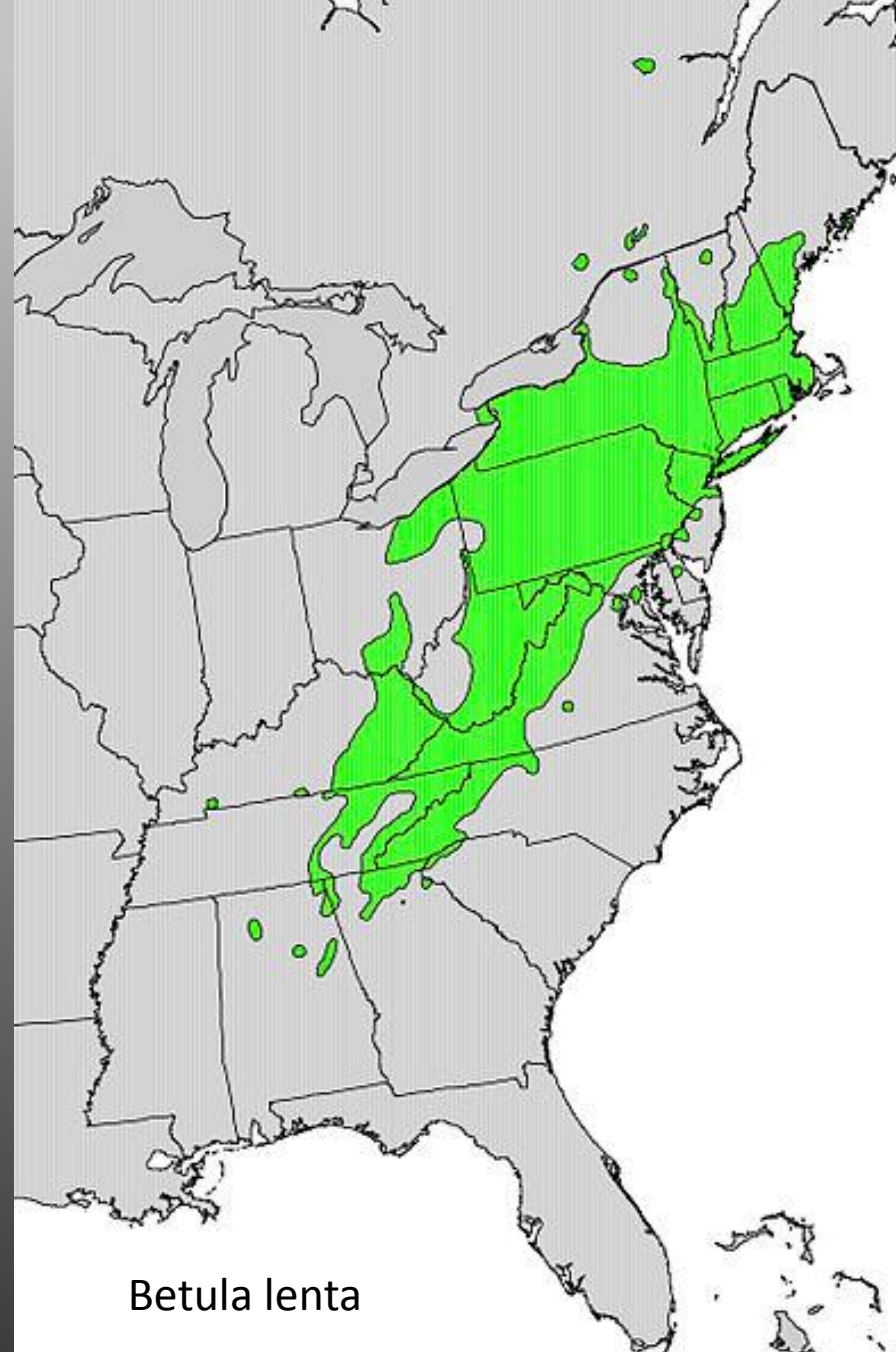
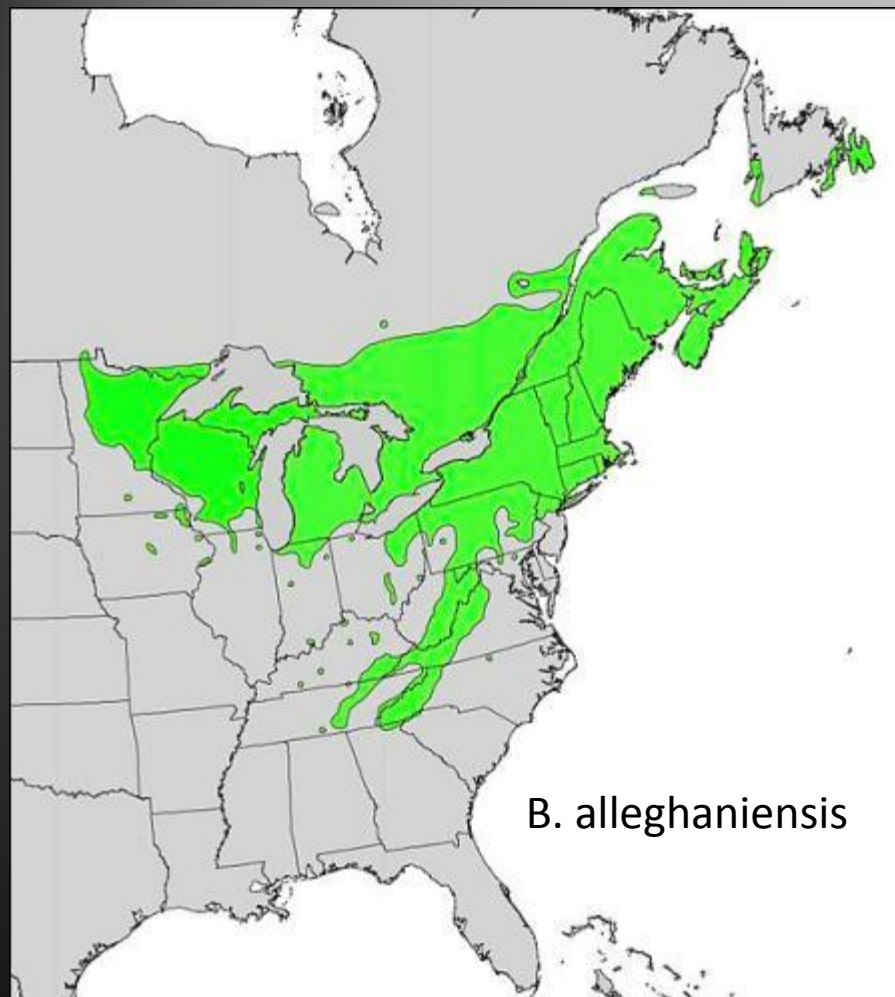








Betula lenta





Halesia tetraptera



Magnolia acuminata









Magnolia fraseri











Ilex opaca







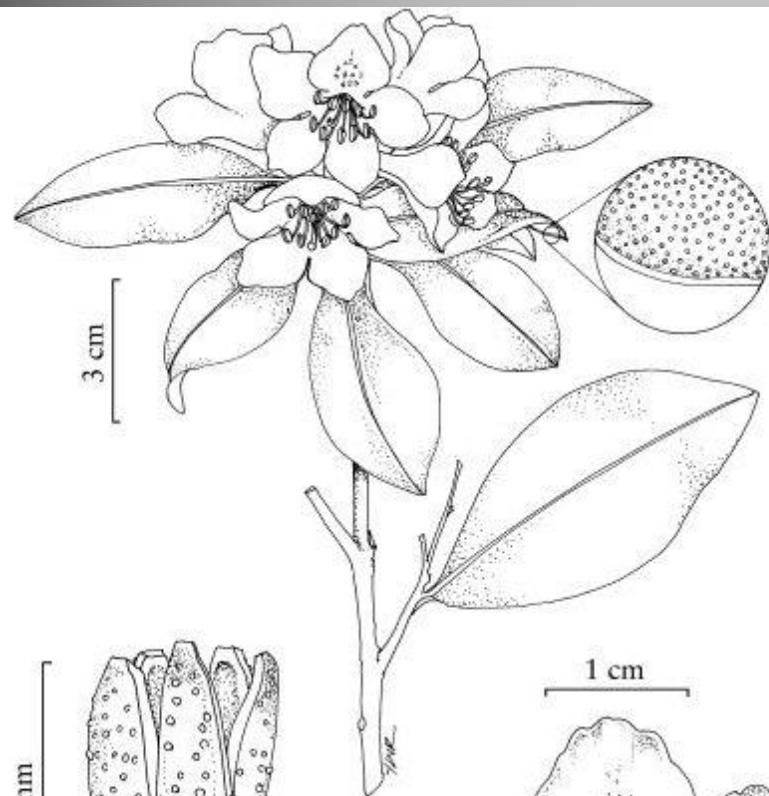




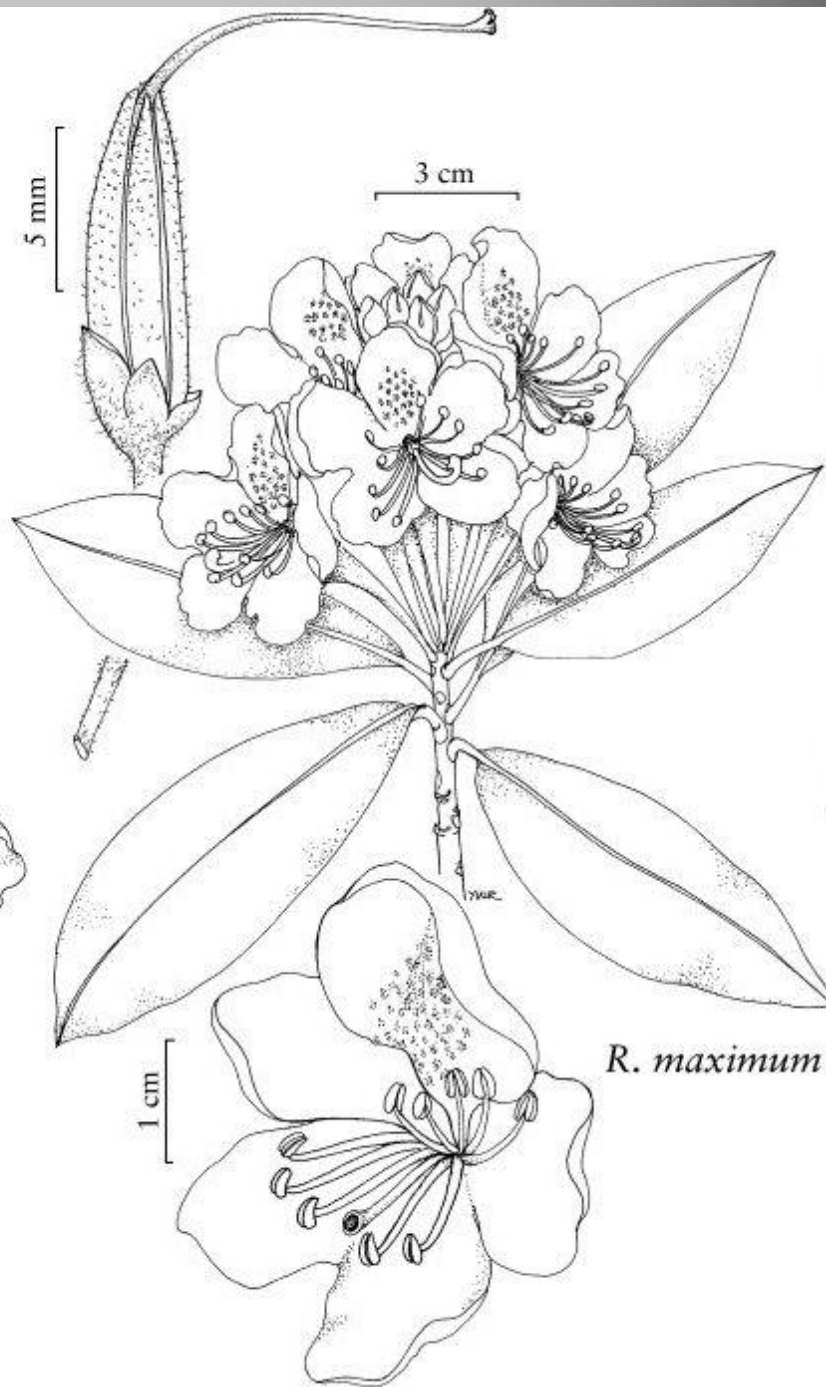
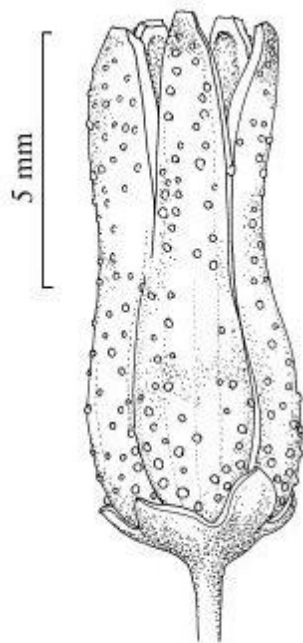








R. minus
var. *minus*



R. maximum





























































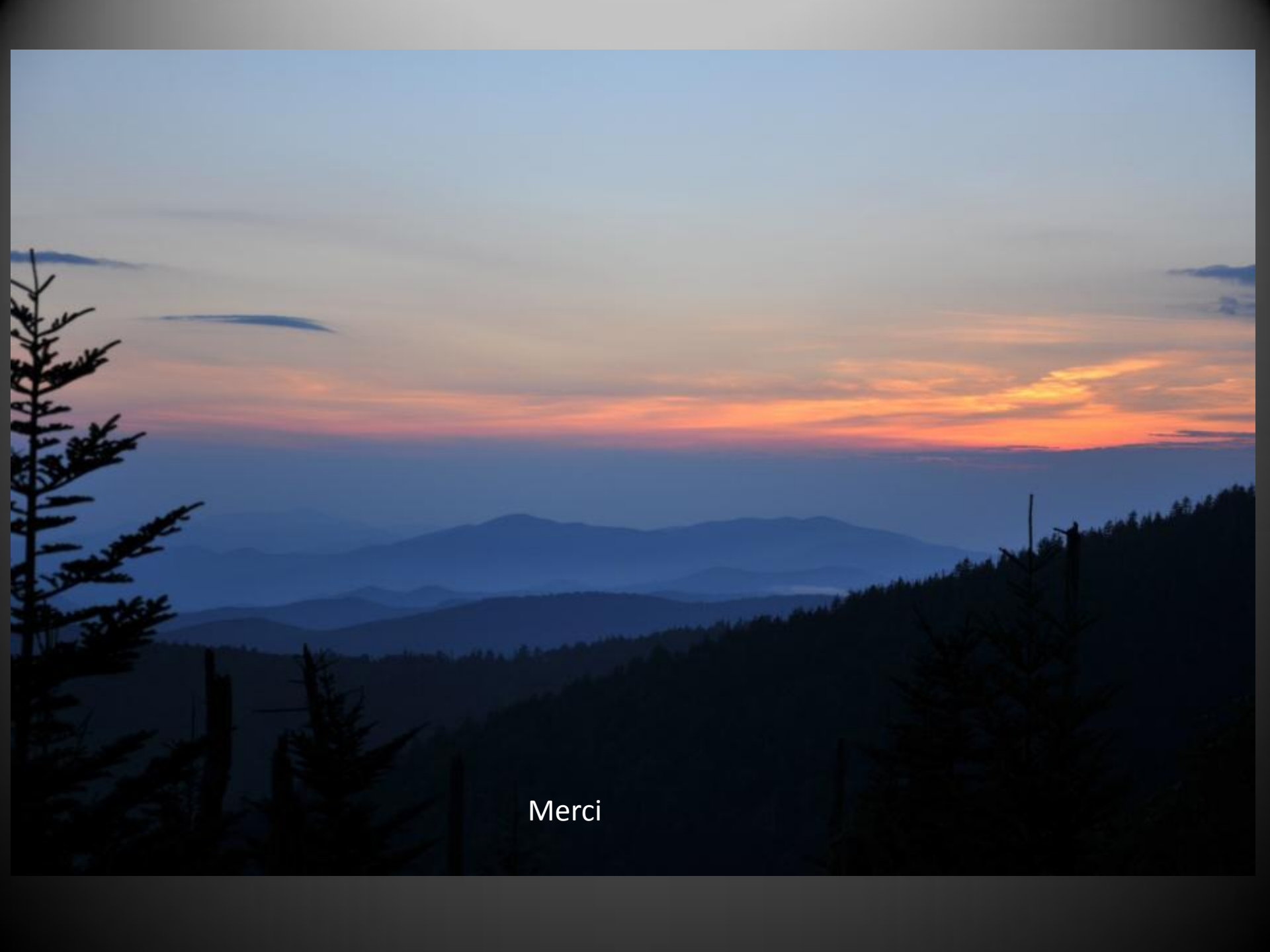












Merci