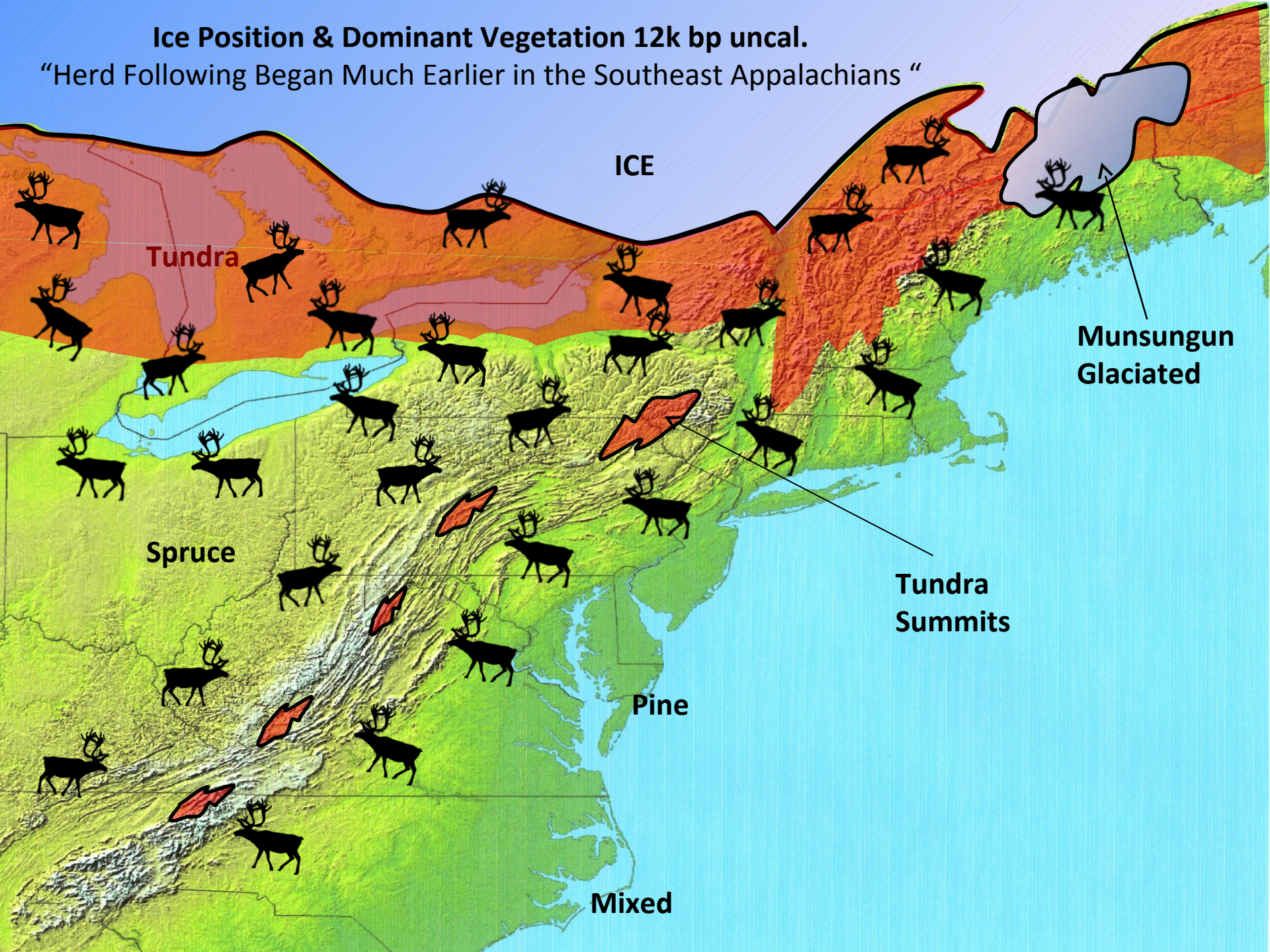


# Ice Position & Dominant Vegetation 12k bp uncal.

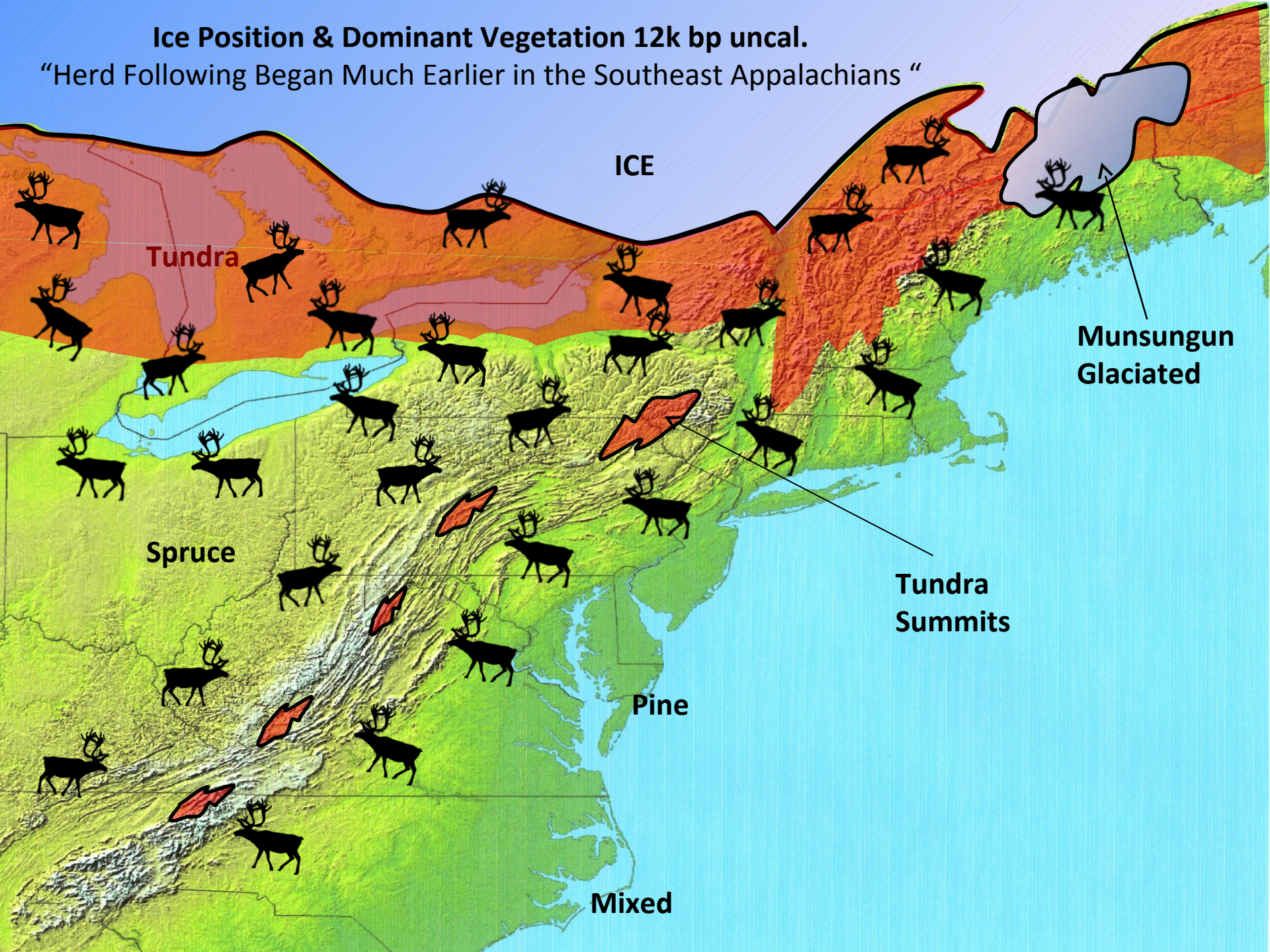
"Herd Following Began Much Earlier in the Southeast Appalachians"





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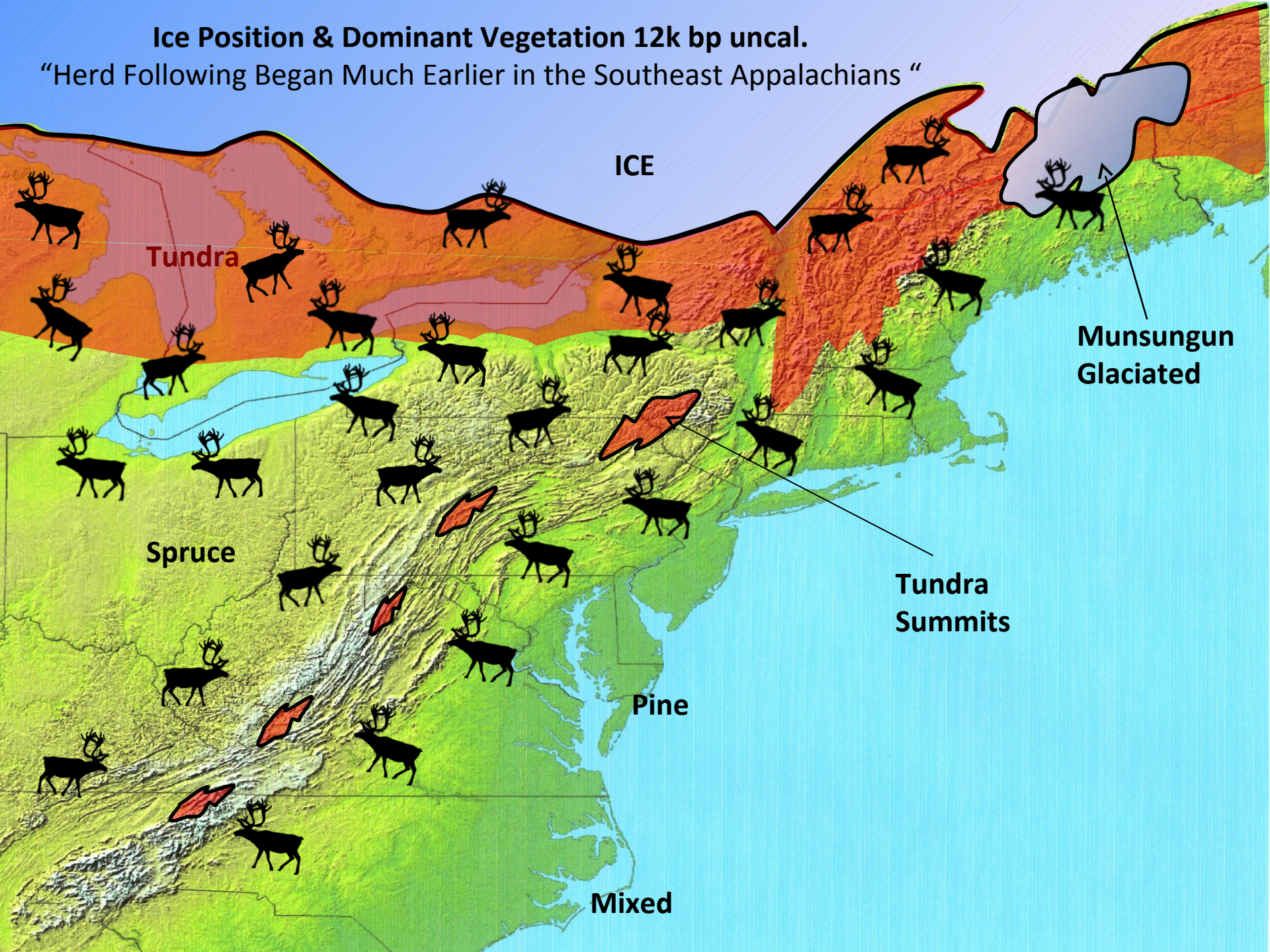
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# Ice Position & Dominant Vegetation 12k bp uncal.

"Herd Following Began Much Earlier in the Southeast Appalachians"





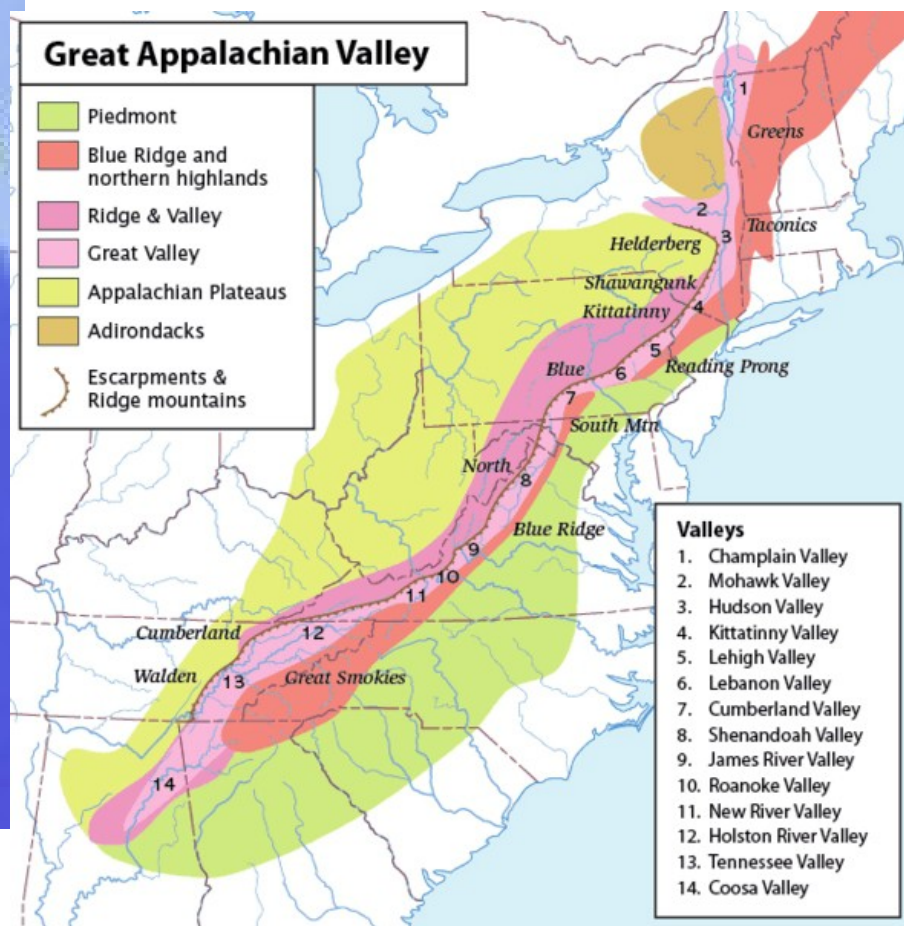
# Climate, Vegetation and Caribou

In north-eastern North America  
from 16.5 ka to 7 ka

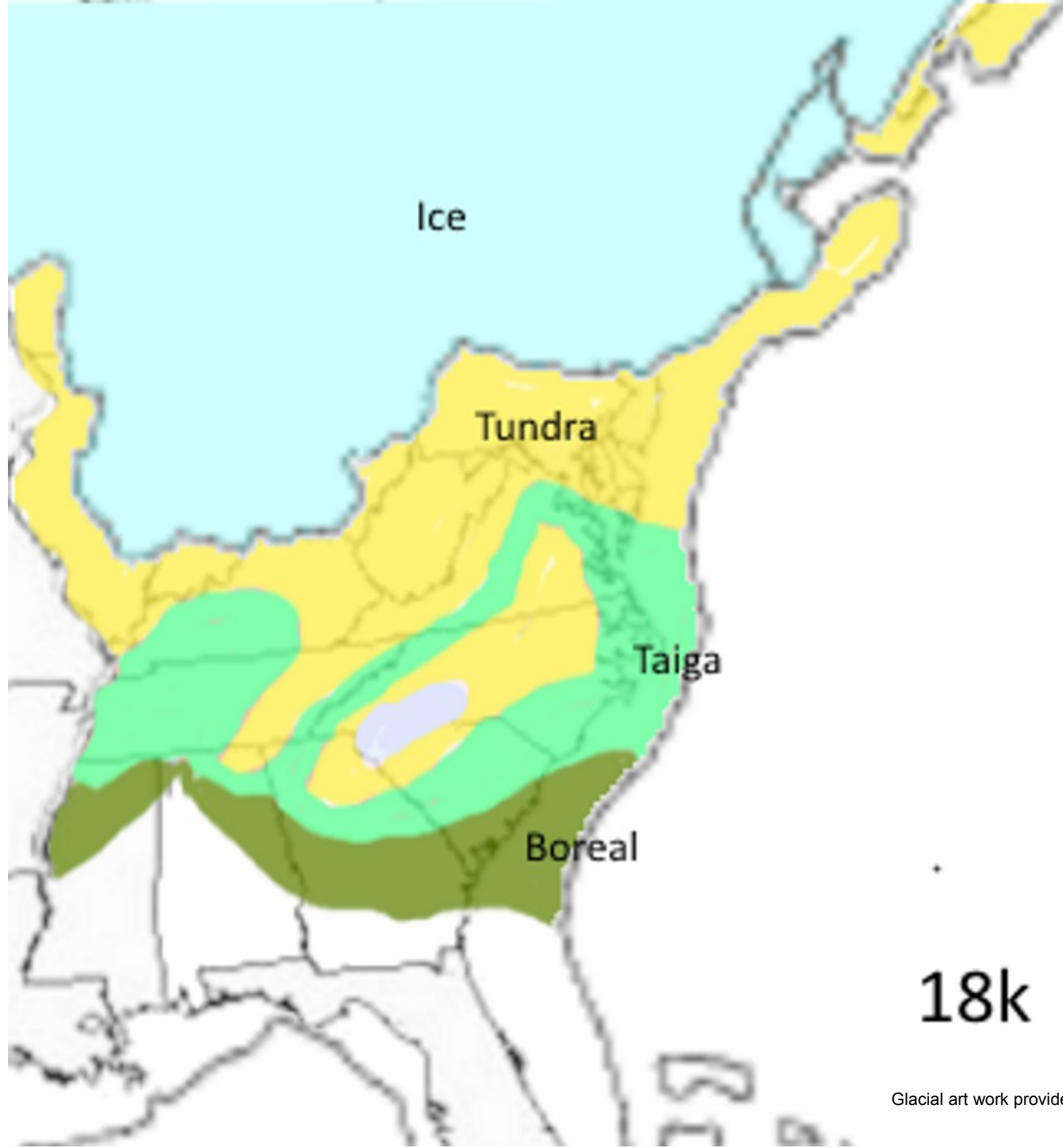
A time of real climate change

Don Gribble 2017

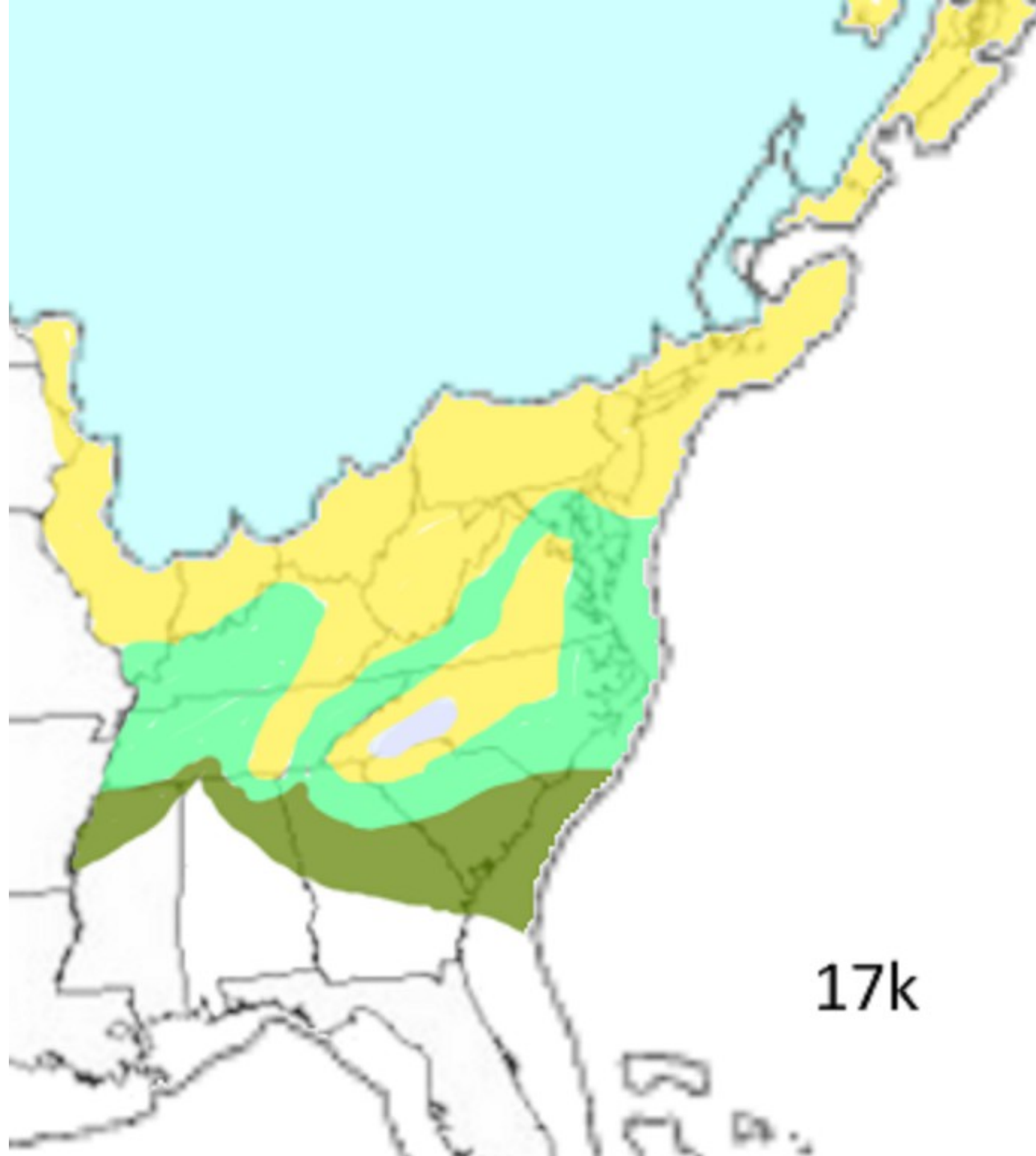








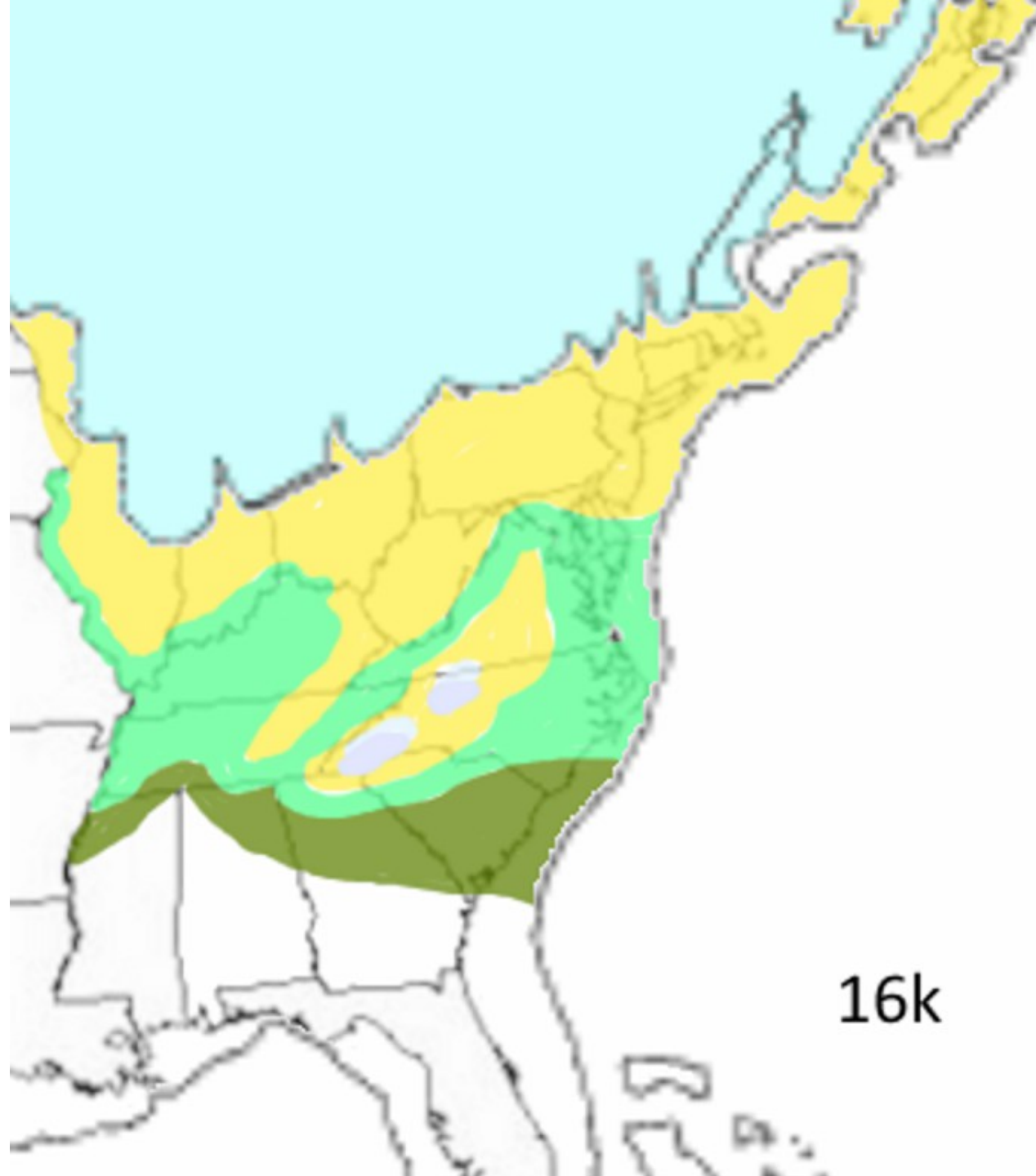




17k

- Ice
- Tundra
- Taiga
- Boreal

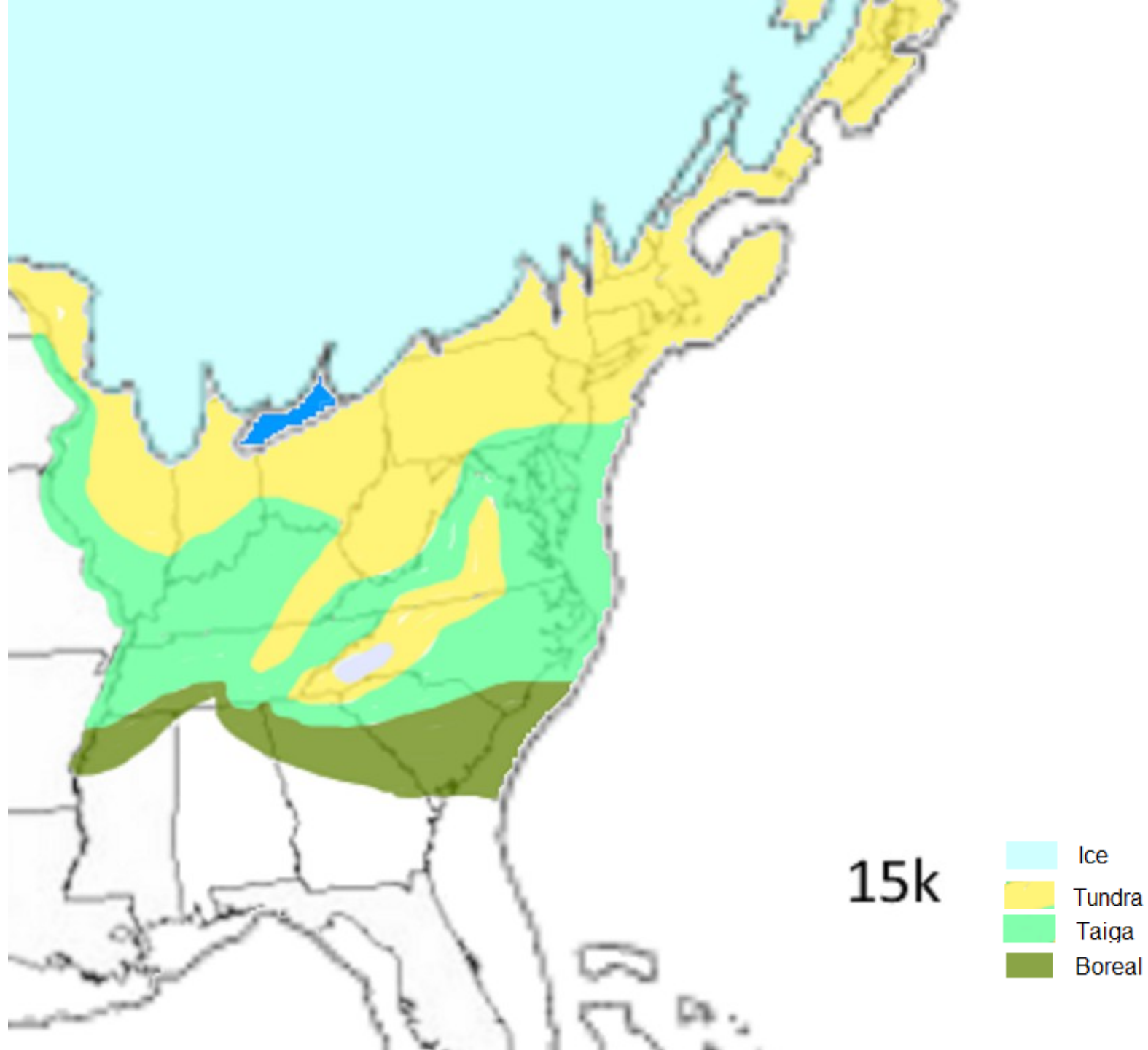




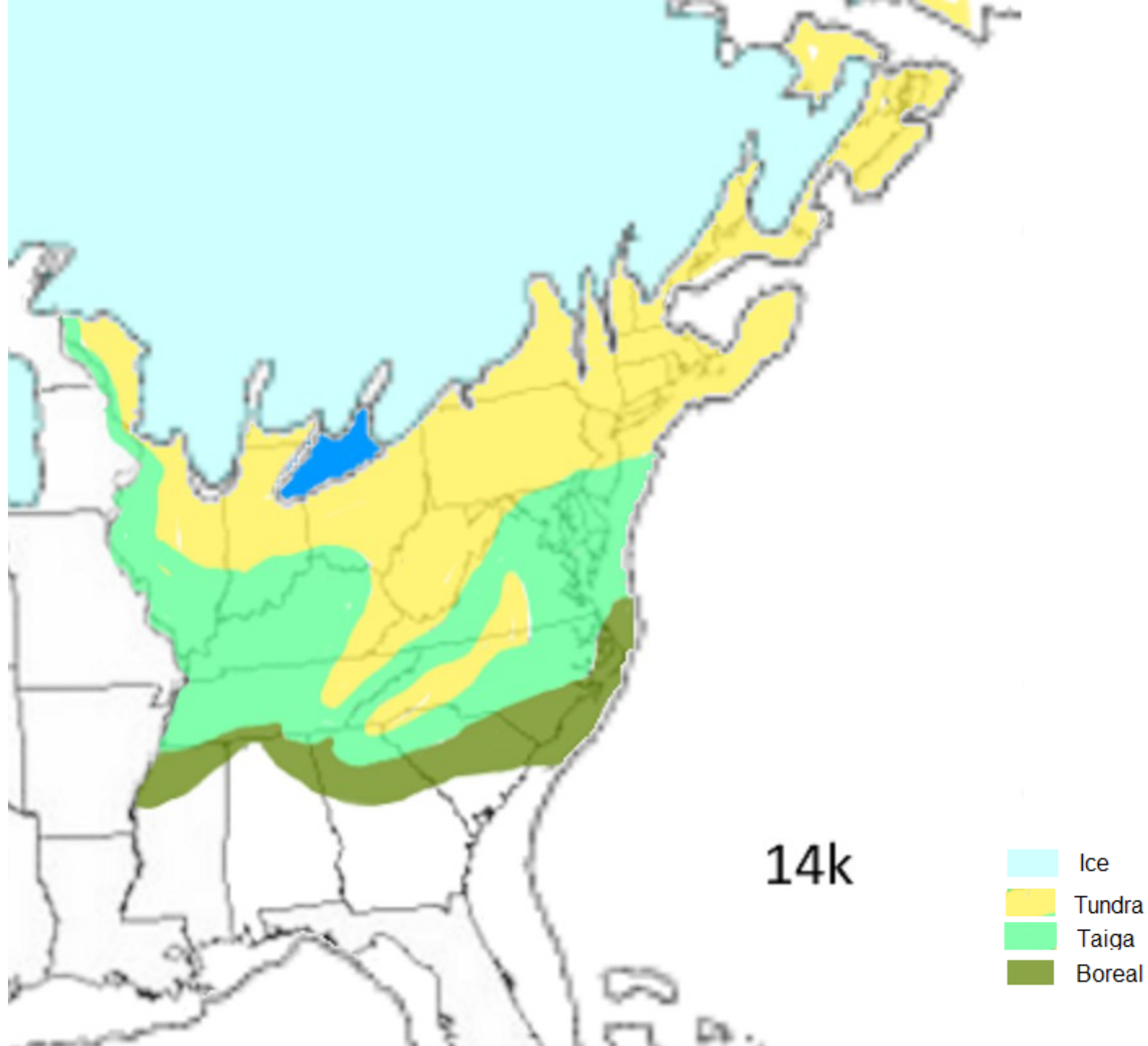
16k

- Ice
- Tundra
- Taiga
- Boreal

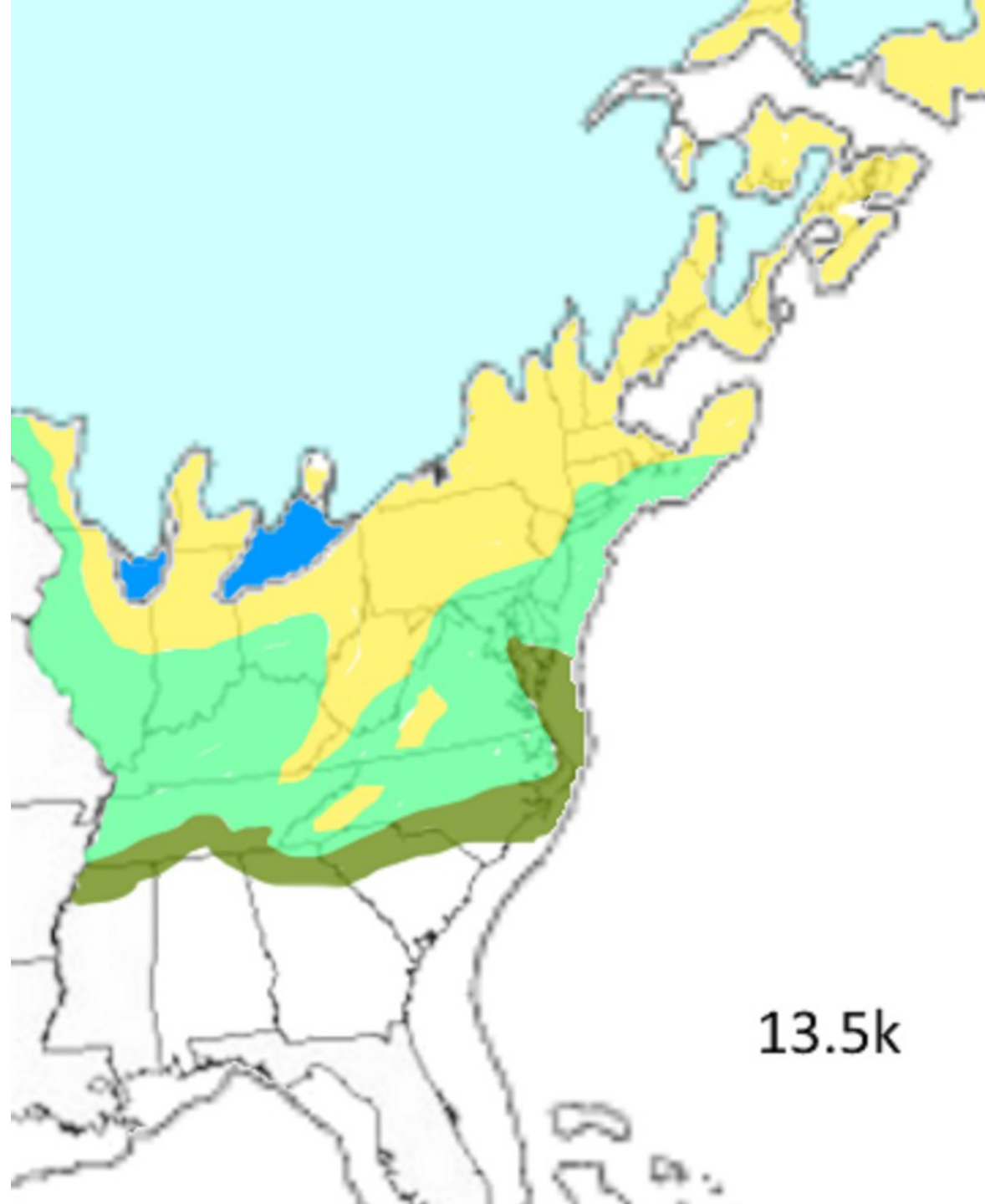








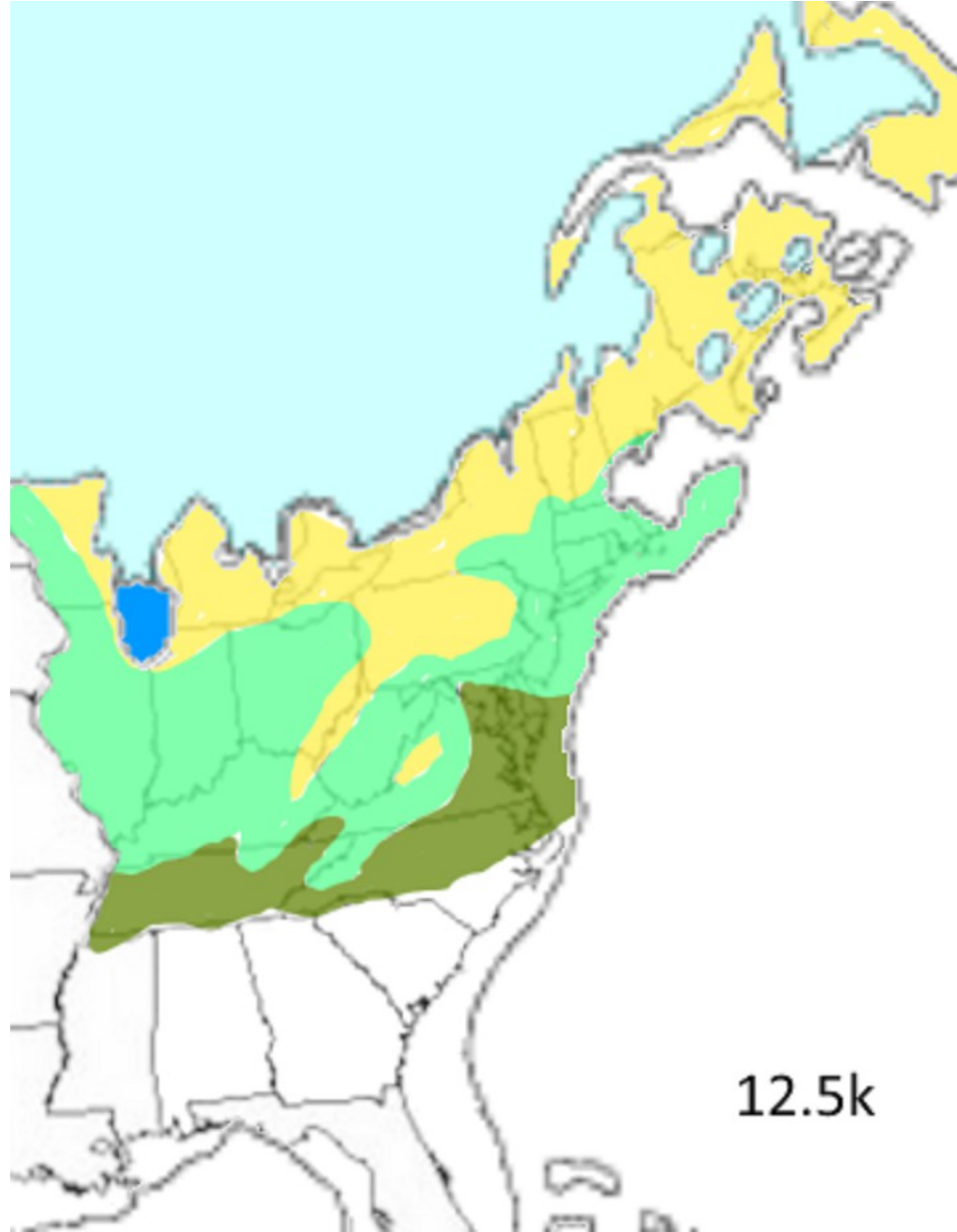




13.5k

- Ice
- Tundra
- Taiga
- Boreal

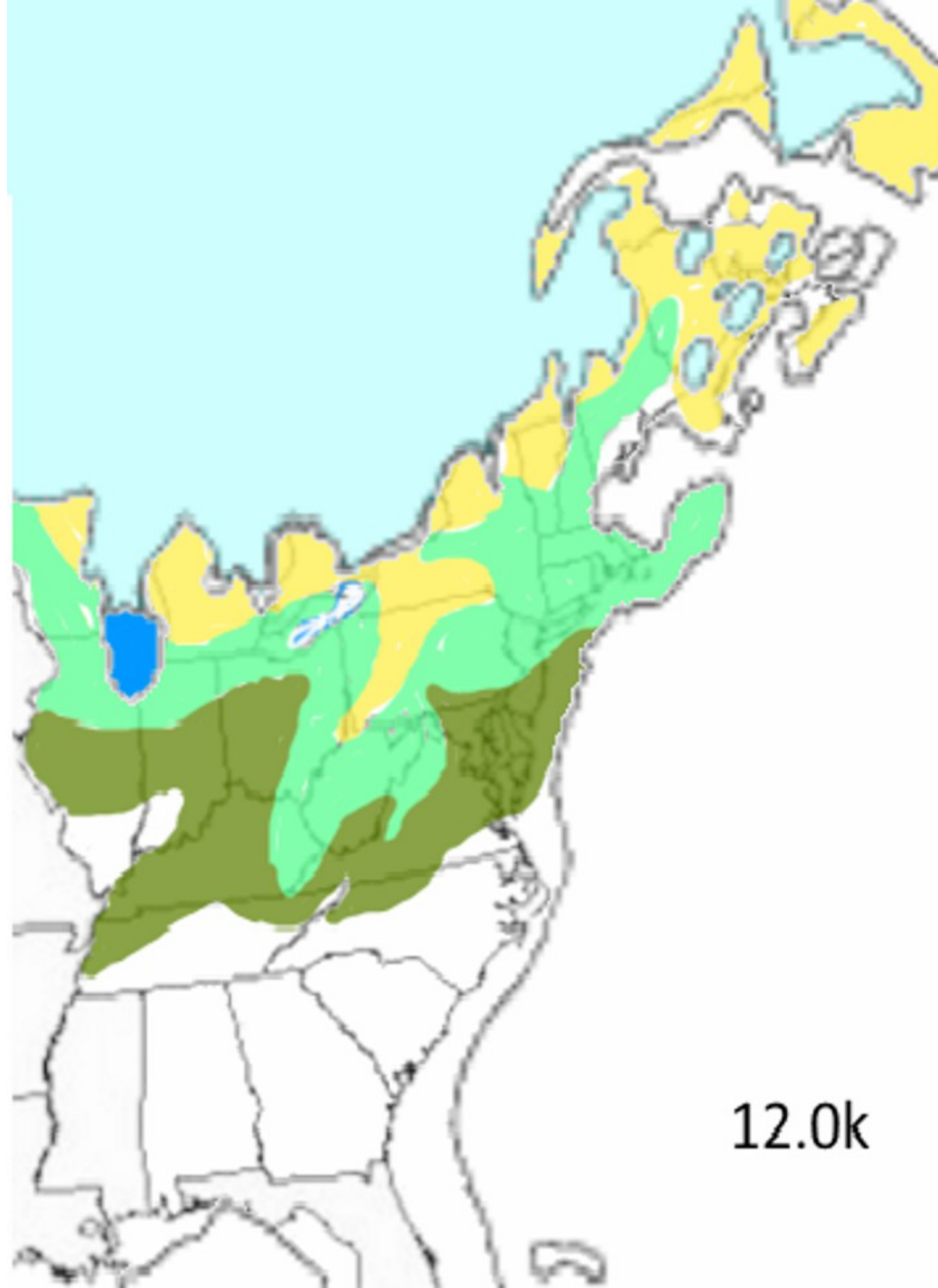




12.5k

- Ice
- Tundra
- Taiga
- Boreal

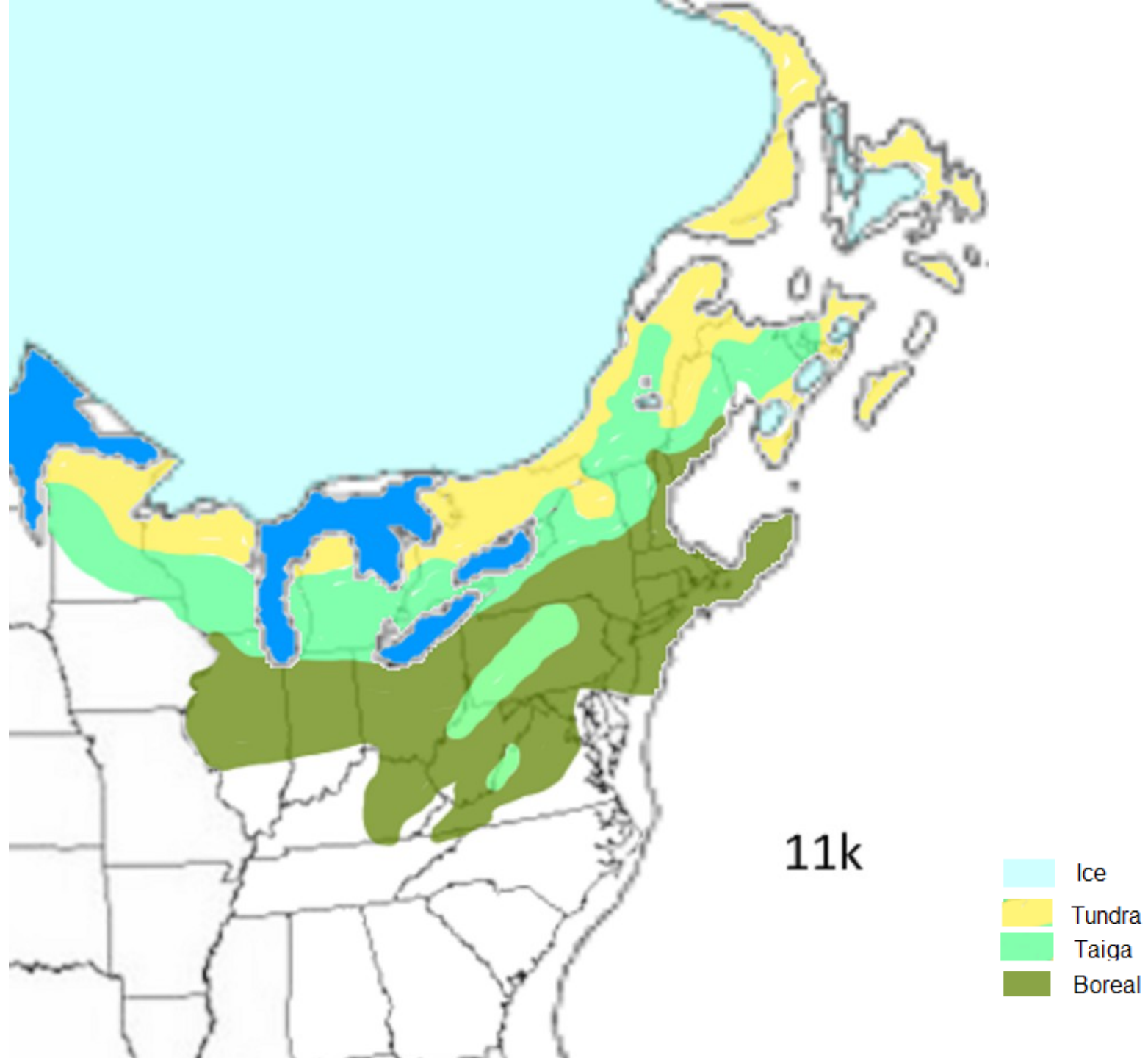




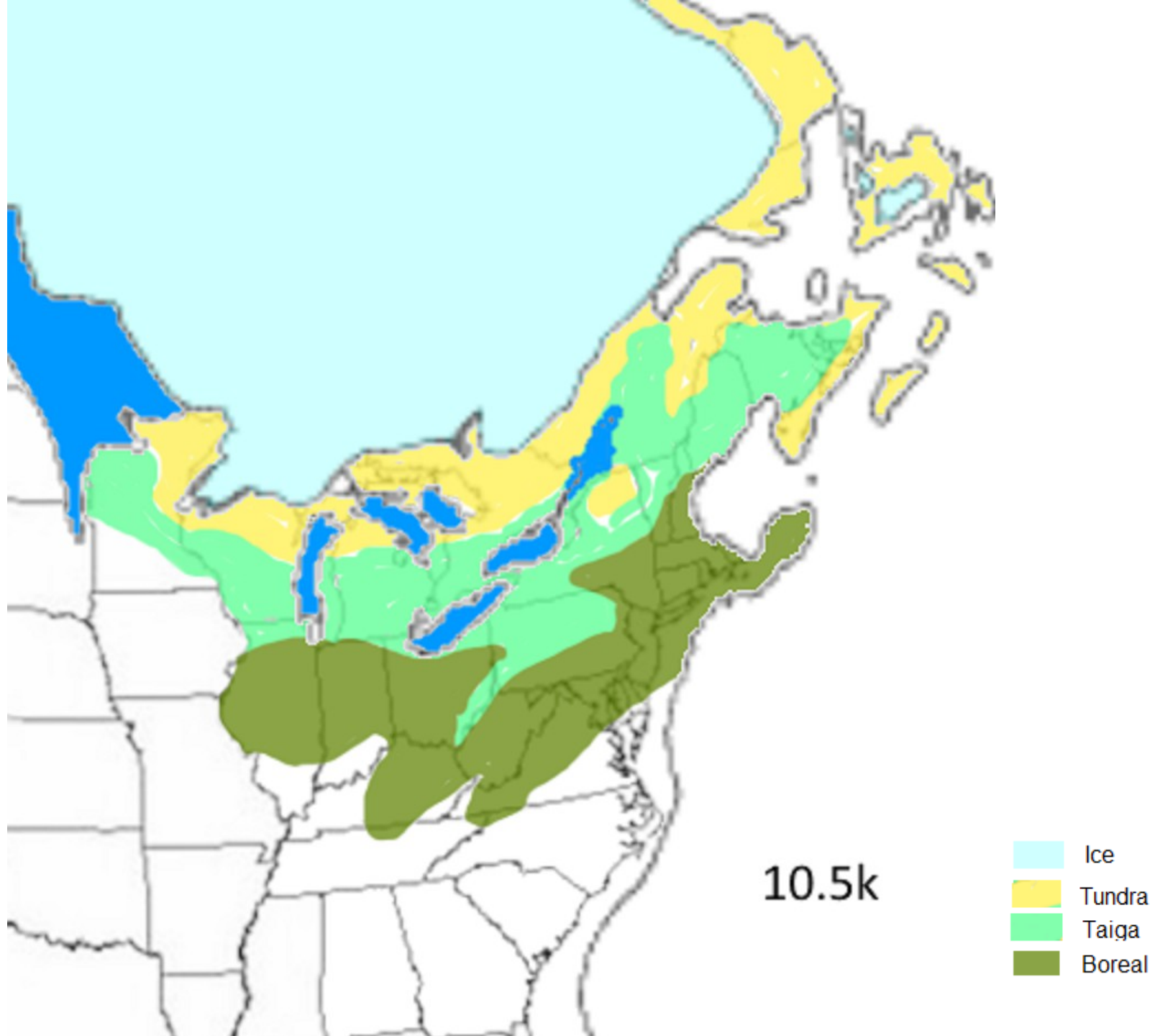
12.0k

- Ice
- Tundra
- Taiga
- Boreal

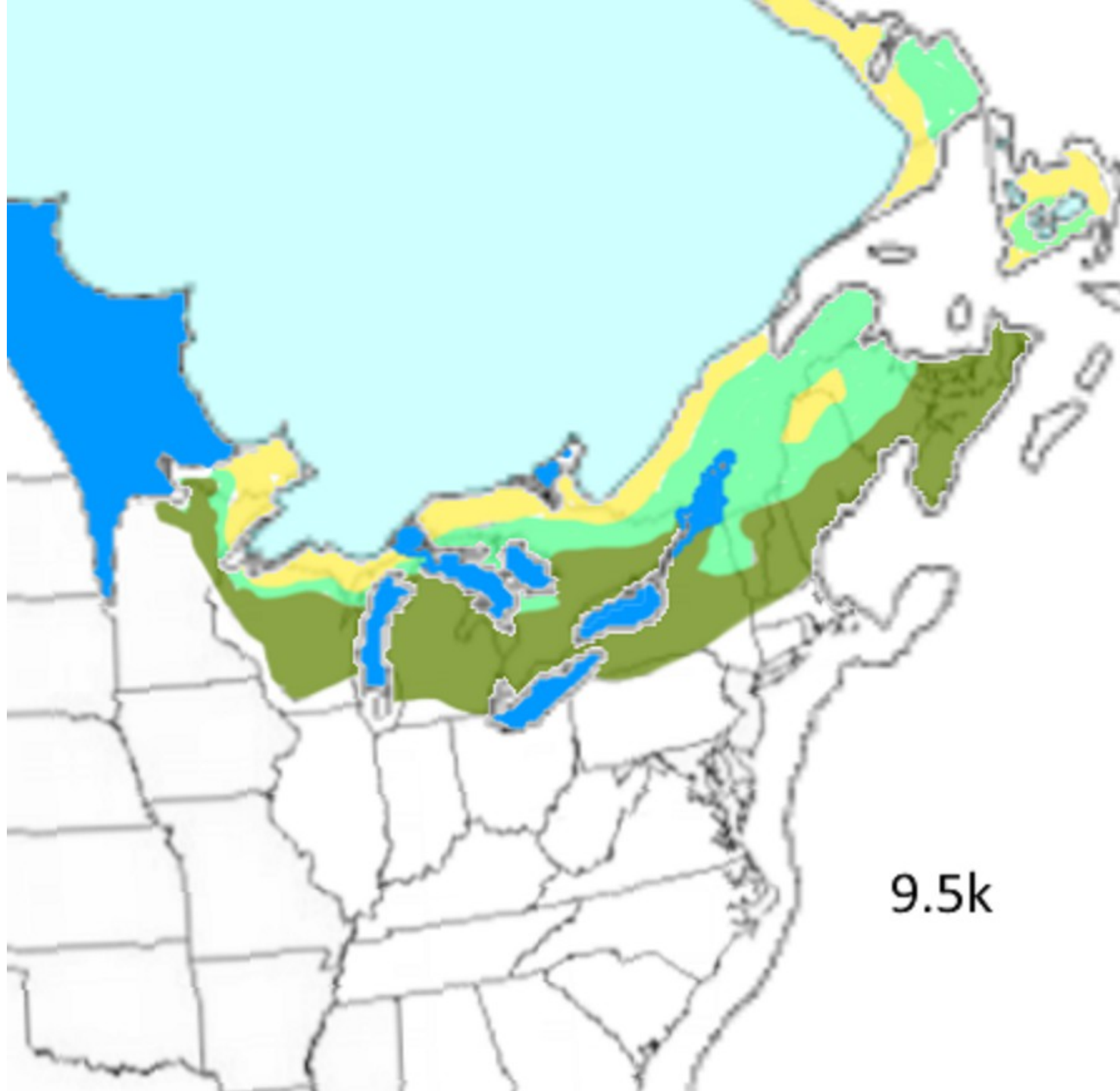








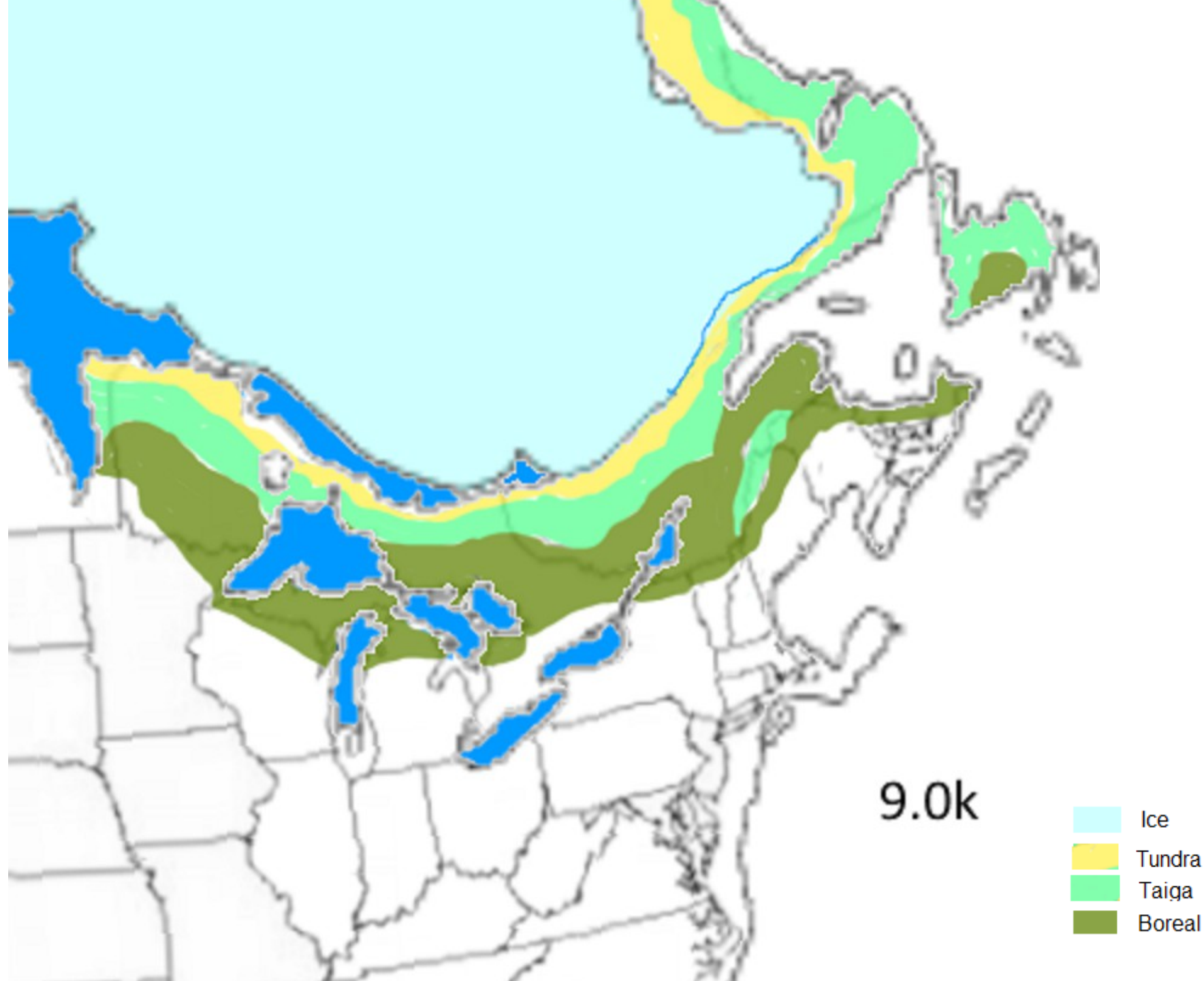




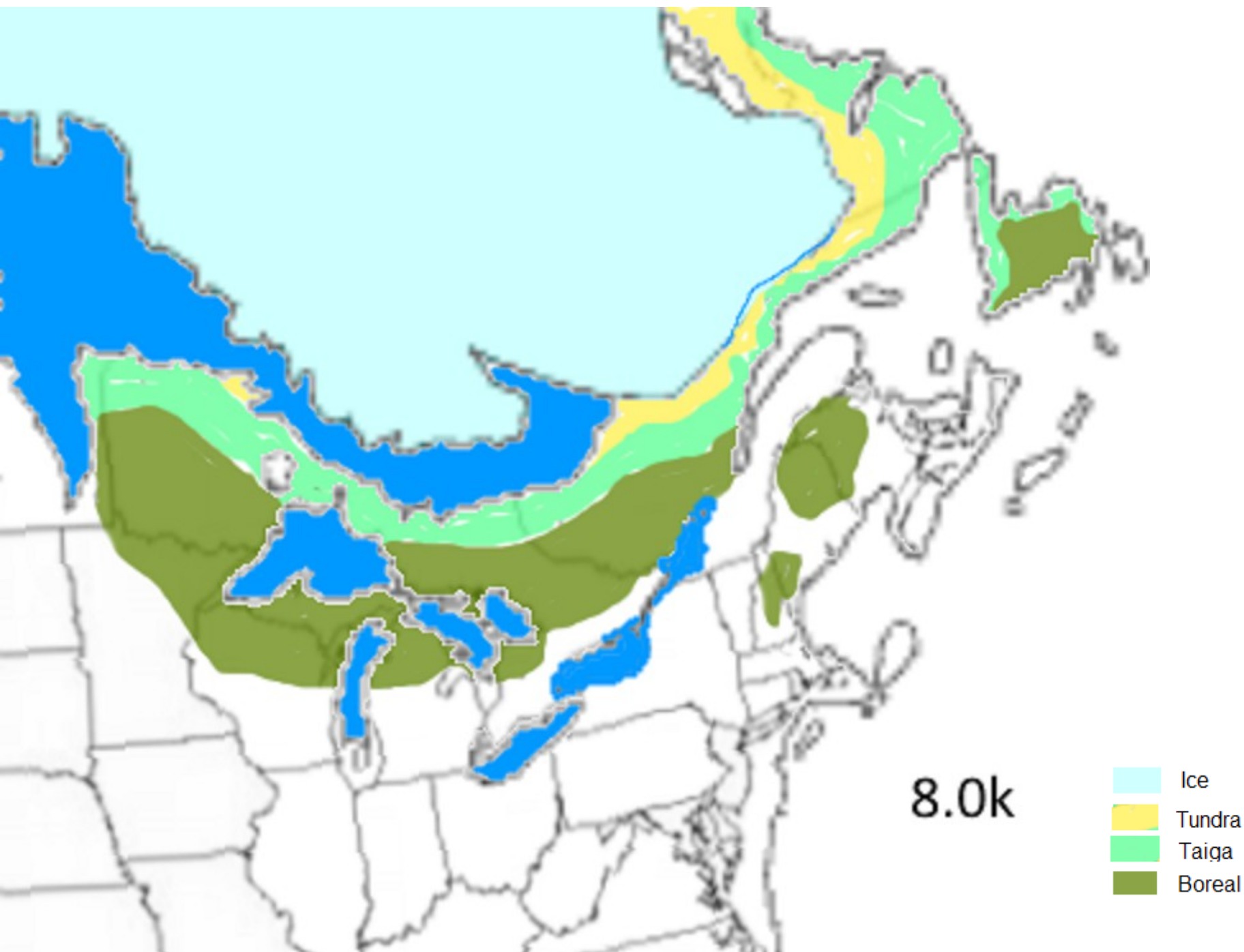
9.5k



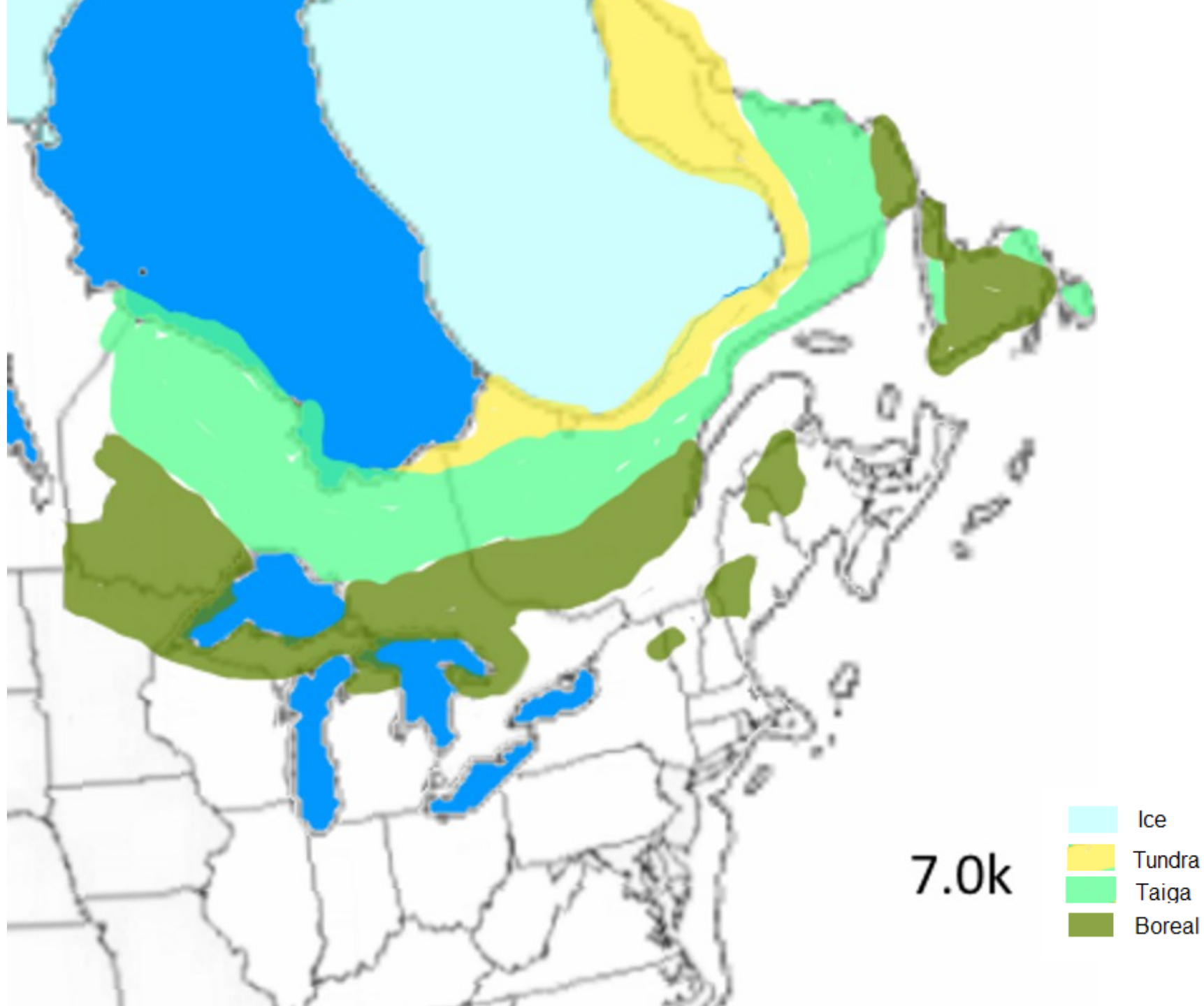




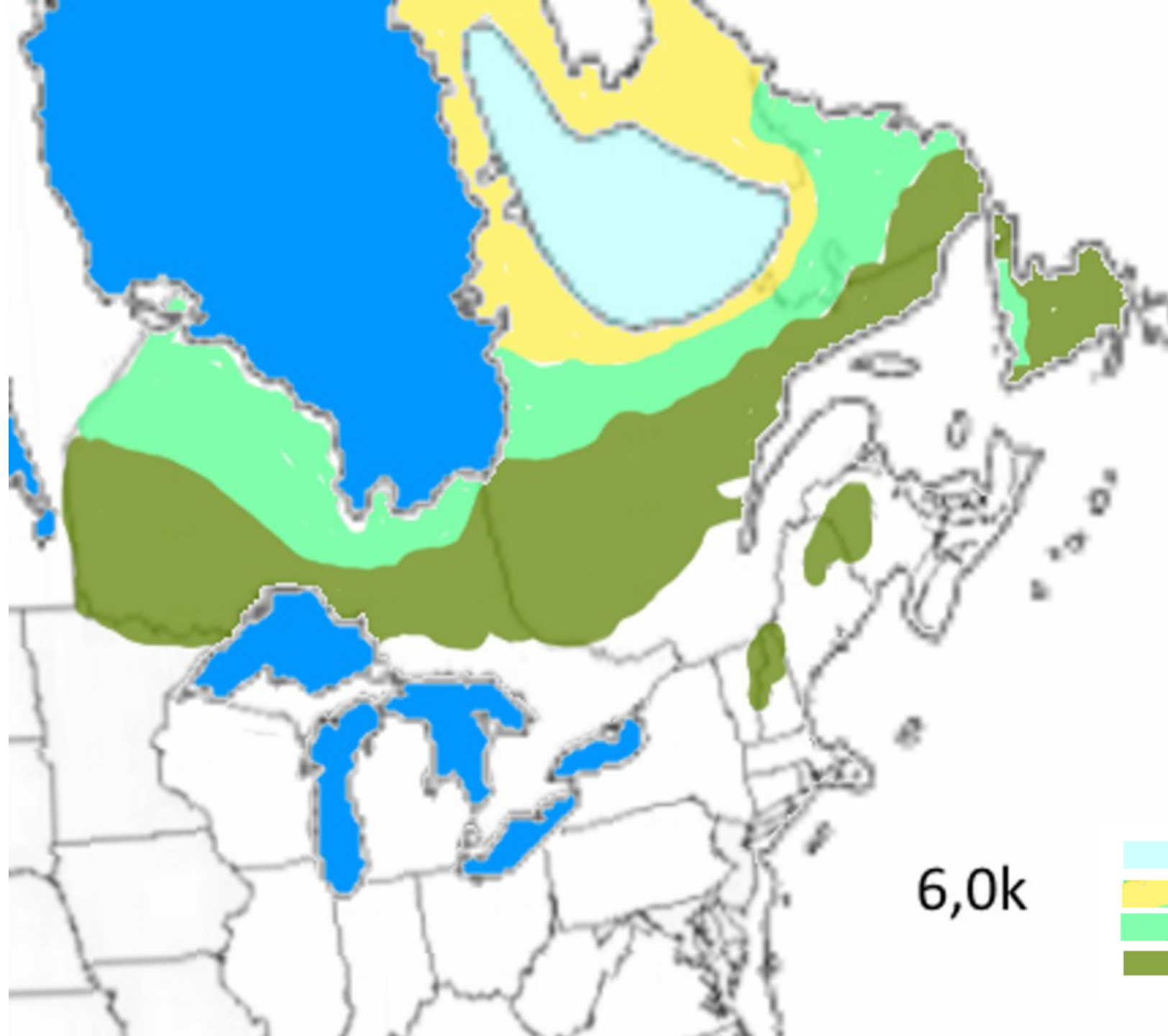




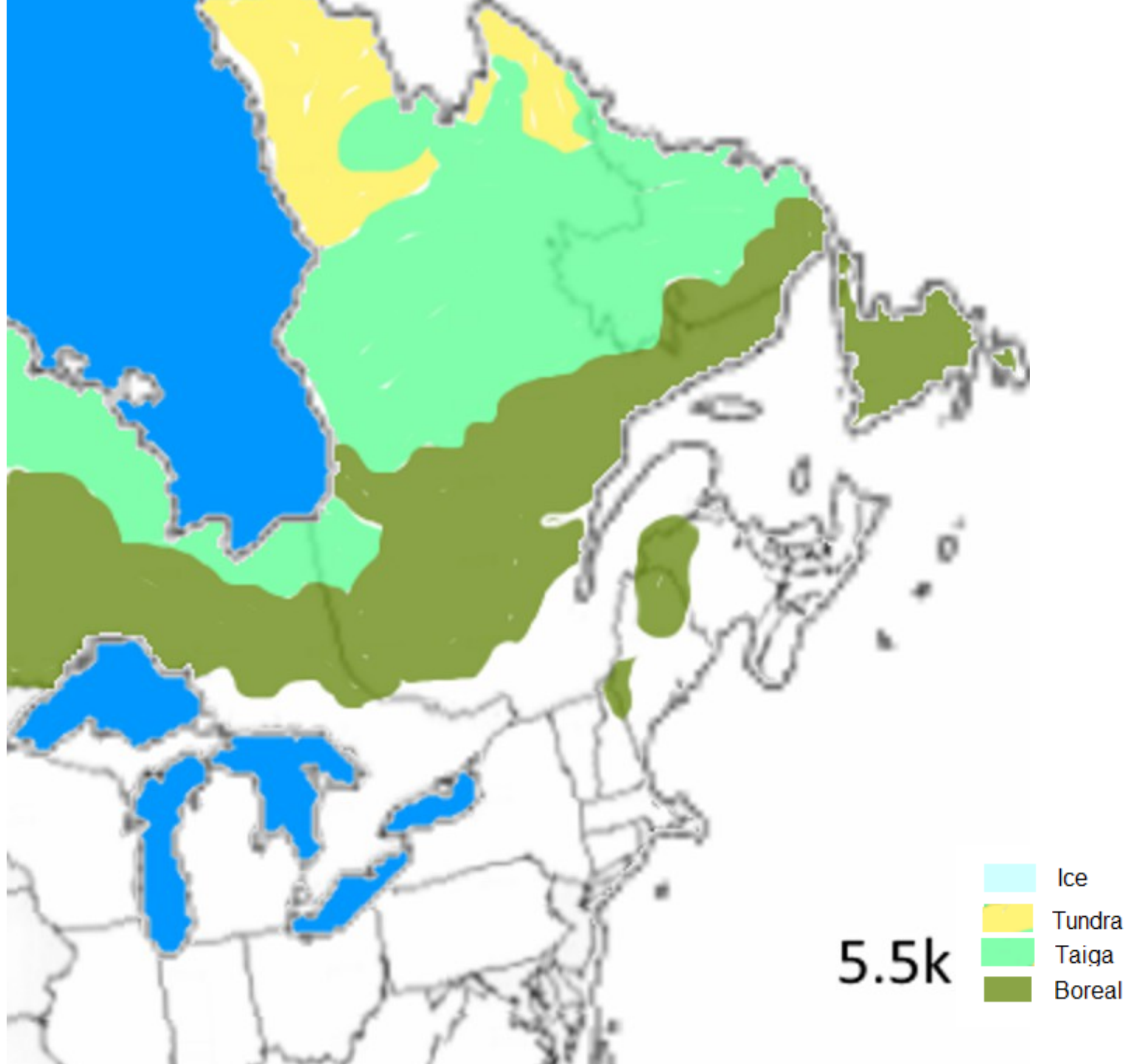






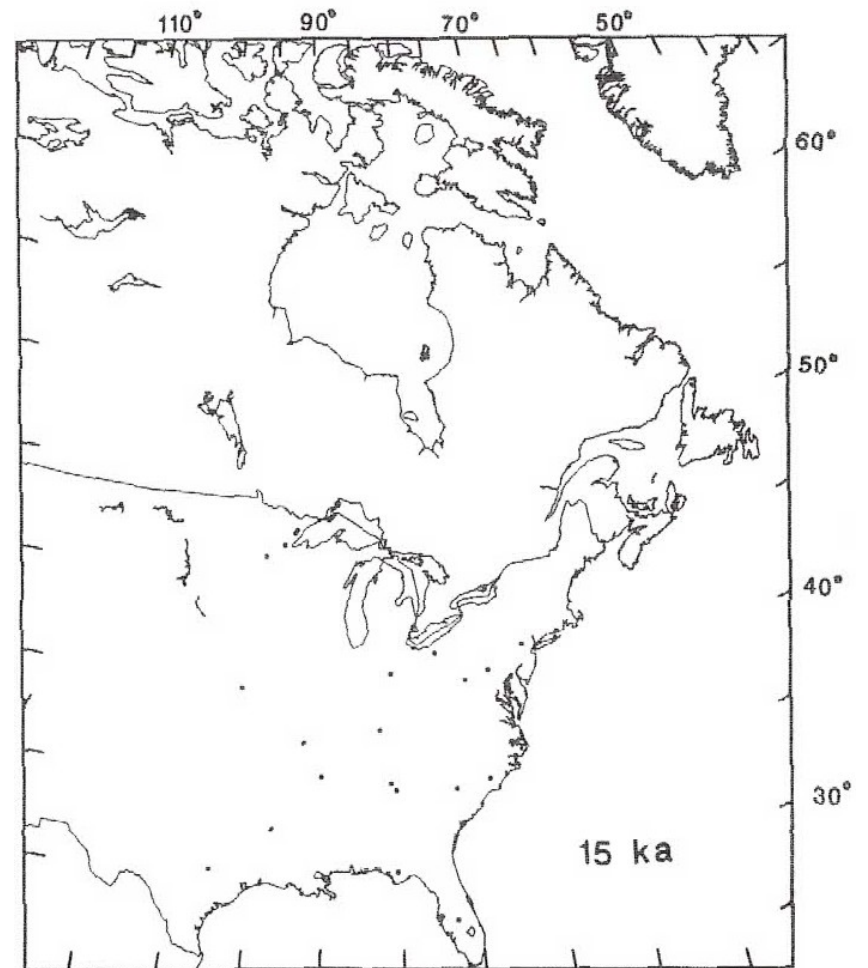
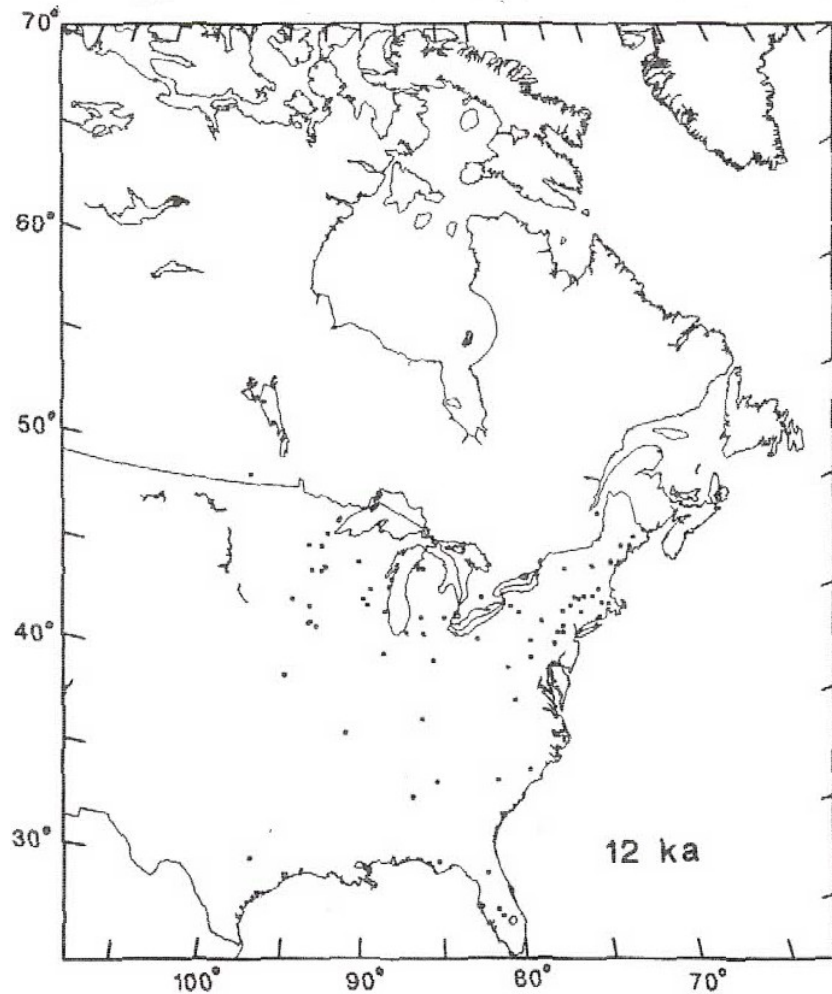








# Very few ancient pollen sites





# Conclusions

- Appalachian refugium was ideal for large caribou herds
- With early glacial retreat caribou habitat expanded
- The Younger Dryas stabilized habitat in Ontario, Southern Quebec and New England
- Southern habitat isolated to high elevations
- Post Y.Dryas boreal advance squeezed habitat north
- Corridor of suitable habitat opened along north shore St.Lawrence to Labrador about 9 ka (or earlier)
- Caribou thriving in Ungava today came from Appalachia
- Did herds cross from N.Ontario or south shore and N.E.?